

STUDY IN ELEMENTS OF TIBETAN MEDICINE

ཡུལ་འཕུལ་ཡུལ་འཕུལ་།

Kamtsang Prayers



ཚུམ་བ་པོ་འདྲ་བར།

Preface

Study In Elements of Tibetan Medicine was a supplementary development of the prepared lecture notes the based on my previous speeches when I has lectured and done research on the origin of the traditional Tibetan Medicine and the most fundamental theories of Tibetan Medicine, Tibetan concepts related to the general organization of the body, elemental components contained in diet and plants successively in universities and academic research institutions in England, America, Italy, Spain and Switzerland since 1994. Those notes had been professionally translated by Elio Guarisco in Italy and Natalia in Spain, their translation had greatly helped me with lectures. In 2002, individually, I looked closely at the original sketch and finally compiled the speech notes to an English monograph on the research of elements of Tibetan Medicine which was of considerable professional value after serious modifications. In order to guarantee the quality of the book, in 2005, I asked Jann Ronis , the Ph. D candidate of Virginia University, to read through the manuscript and then give remodification in specific grammar and expressions, additionally, as for technical terms of Tibetan Medicine, under the help of Tsring Donthog, the Tibetan American and abroad student of Central University of Nationalities, we made contrast and confirmation literally. In 2008, Mr Angus, the guest full-time English teacher of the Department of Tibetan Studies of CUN, have intensively read and grasped the overall situation with extreme kindness, and then the notes has been eventually developed into this book on Tibetan Medicine. Here, sincerely, I present my heartfelt appreciation to these kind friends who had given supports and suggestions to the book, I am overwhelmed by the enthusiasm expressed by you. And meantime, I also want to take this opportunity to specially thanks my wife who had invariably stand by my side all her life and her deep devotion to my academic achievements.

Thupten Phuntshok
2009.1.1.in Beijing

ནང་དོན་གནད་བསྟུས།

གངས་འཕྲི་པར་དུ་མ་ཡིས་ཅུ་ཞོས་བསྐྱེད། །
 མི་ཚེའི་མདུན་ལམ་གཞན་གྱི་ཡུལ་དུ་བཅུལ། །
 ཡིག་རྟེན་བསྐྱུགས་ཀྱང་ལྟ་བ་གསར་པ་རྟེན། །
 རྒྱལ་ཁམས་འགྲིམས་ཀྱང་རང་གི་སྡེ་ལ་ཞེན། །

སྒྲིབ་རྒྱན་རིག་གཞུང་རིག་གསར་སྒྲིག་དུ་སྦྱངས། །
 དེར་རབས་ཤེས་བྱ་རྒྱལ་ཁམས་ཀྱན་ནས་སྤངས། །
 རང་སྡེའི་རིགས་ལ་དགོས་པའི་རིག་གཞུང་འགར། །
 དཔུང་པའི་ནམ་བཤད་སུ་སྟེ་བདུན་པག་གཉིས། །

གནའ་རབས་མཁས་པའི་གཞུང་འགྲེལ་བསྐྱར་དུ་བབ། །
 དེར་རབས་ཚན་རིག་གཞན་གྱིས་བཤད་སྒྲིབ་འཛོལ། །
 ཡིག་རིགས་གང་འདོད་སྒྲིབ་མའི་སྒྲིག་རྒྱུ་བཞུགས། །
 མཁན་སྤྱལ་མཁས་པའི་གསུང་དང་འདི་མི་འདྲ། །

གཞུང་གི་ལས་གཞི་སྒྲིག་གིས་བདག་བཟུང་བྱེད། །
 དཔུང་འབྲས་གང་དགོས་གཞན་གྱི་ལག་ནས་ཉོ། །
 ཞིབ་འཇུག་མེད་ཀྱང་དཔུང་ཚྭ་ཆར་ལྟར་འབབ། །
 སྒྲིབ་གྲུའི་དཔོན་རིགས་ཚྭ་དང་འདི་མི་འདྲ། །

རིག་པའི་གནས་ཀྱན་ཅས་པའི་བཅུད་དུ་སྤངས། །
 དོན་གྱི་གནས་ལྷགས་ཤེས་རབ་སྒྲོང་ནས་བཅུལ། །
 ཡིག་འབྲུ་རེ་བཞིན་སྤྲད་པའི་ཚ་ལམ་བརྟུན། །
 ཟུངས་ཁག་དོན་མོས་བསྐྱེད་པའི་དཔུང་ཚྭ་ཡིན། །

ཁོ་ལོ་གཞོན་ཀྱི་རྒྱུ་ལྟ་རིག་གནས་གསར་བཟུང་སྐབས་དང་འཁེལ་ཡོད་ཀྱང་སྒྲིབ་ཀྱི་
 དགོ་ཆུང་ཐང་སྒྲིབ་ཆོ་དབང་དང་། རྒྱལ་ཆེ་པུ་བདེ། ཡོན་ཏན་ལྷན་ཆོགས། ཡོན་ཏན་
 དཔལ་བཟང་། དབུ་མཛེད་བཟོད་པ་སོགས་སྒྲིབ་གཞིར་སློབ་དཔོན་ལ་བསྟེན་ནས་ལུས་
 རྒྱལ་པོ་དག་གསུམ། རྒྱན་དག། རྒྱར་ཅིས་དང་འབྱུང་ཅིས། གསོ་བ་རིག་པ་སོགས་ལྷན་མོང་
 རིག་གནས་དང་། གཞུང་བཀའ་ཤོད་ལྟ་དང་། རྒྱུ་བརྒྱུད་ཀྱི་གསུམ། ཆོ་ག་ཆོས་སློབ་
 སོགས་ལའང་བག་ཆགས་ཅིམ་འདྲིལ་པའི་སློབ་གཞིར་བྱས། བཅོས་བསྐྱར་སྒྲིབ་ཀྱི་སྐབས་
 ལུ་སི་ཁོན་ཞིང་ཆེན་པོ་དེ་ཡིག་སློབ་གྲུའི་ནང་དུ་ཞུགས་ཏེ་བོད་ཀྱི་སློབ་ལྷན་རིག་གནས་ཀྱི་སློབ་
 ཆུང་ལྷན་ལ་སློབ་སློབ་མཐར་ཕྱིན་པར་བྱས། སྤྱི་ལོ་༡༩༥༦ལོར་སློབ་གྲྭ་ནས་ཐོན་རྗེས་ལུ་པེ་
 ཅིང་ཀྱང་དབྱང་མི་རིགས་སློབ་གྲྭ་ཆེན་མོའི་ནང་དུ་དགོ་ཆུང་གི་ལས་ཀ་སྒོལ། སྤྱི་ལོ་༡༩༥༥
 ལོར་དེ་བར་ལོ་ལྷུ་ལོ་ལོ་བོད་དང་། ལ་རི་སོགས་ལྷན་སྐྱེས་ཀྱི་སློབ་གྲྭ་ཆེན་མོ་ཁག་ལ་པུན་
 ཆུན་རིག་གནས་བཟུང་ལེན་གྱི་བཟོ་སྒྲིབ་དང་ཞིབ་འཇུག་གི་འབྲེལ་བ་རྒྱུན་མ་ཆད་པ་ཆགས།
 དེར་བརྟེན་དེར་རབས་རིག་གནས་ཀྱི་བསམ་བློ་དང་འཁེལ་སྟོགས་རྣམས་ལ་སློབ་སློབ་དང་
 ཞིབ་འཇུག་གི་འགྲོ་ལམ་གསར་པ་ཞིག་བརྒྱུད་ནས་ལུ་མཐུད་དེ་བོད་ཀྱི་སློབ་ལྷན་རིག་གནས་
 རྣམས་འཛུགས་སྒྲིབ་སྤྱི་ལོ་རིག་གནས་དང་བསྟེན་ཞིང་རྒྱུ་རབས་དང་མཐུན་པའི་སྒྲིག་སྒྲུབ་དོར་
 བཅུད་ལེན་གྱི་ཆུལ་དུ་ཞིབ་འཇུག་བྱས་ནས་བརྗོད་ལ་སོགས་བོད་ཀྱི་རིག་གནས་རྣམས་དེར་
 རབས་ཆུང་རིག་དང་མཐུན་པའི་རིག་གཞུང་གི་འགྲེལ་བཤད་གསར་པ་ཞིག་བྱས་ཡོད། །

འདི་ནི་བོད་ཀྱི་སློབ་ལྷན་རིག་གནས་ནང་དུ་དེར་རབས་ཆུང་རིག་དང་མཐུན་པའི་ལྷ་བ་
 དང་འགྲེལ་བཤད་རྣམས་རང་སྤོང་བཞག་ཅིང་། རྒྱུ་ལྟ་སྒྲིབ་པའི་གནའ་བོའི་འབྲེལ་རྒྱུ་གི་
 འགྲེལ་བཤད་གང་ཡོད་དེར་རབས་ཆུང་རིག་གི་རྣམ་བཤད་ལྷུ་ལེགས་བཅོས་བྱས་ཏེ། ལྷང་
 རིགས་གཞིས་ཀྱི་སྒྲིབ་ནས་མཐའ་དབྱུང་བཏང་སྟེ་བྱིས་ཡོད་སྐབས་བསྟན་བཅོས་སོ་སོ་ལ་ཐུན་
 མིན་གྱི་བྱུང་ཆོས་ལྟར་པ་ཤ་སྟག་ཡིན། །

༡ ལུས་རྒྱལ་པོ་འགྲེལ་པའི་བྱུང་ཆོས། གཙོ་བོ་སི་རུའི་འགྲེལ་ཆེན་གྱི་དཀའ་གནད་ཀྱི་
 འགྲེལ་བཤད་ཡིན་པ་གཞིར་བཅས། རྒྱལ་པོ་འཇུག་པའི་ལས་ཆོག་སྐབས་ལུ་སི་རུའི་འགྲེལ་
 ཆེན་ལས་བྱ་བྱེད་ཐ་དད་མིན་ཞེས་པ་དང་། བདག་གཞན་ཤེད་མཚུངས་མིན་ཞེས་པ་གཞིས་
 དོན་ལ་གཅིག་ཡིན་པའི་དགོངས་འགྲེལ་དང་དཔེར་བཞིན་ལ་ཞིབ་ཏུ་བརྒྱལ་ནས་བྱ་བྱེད་ཐ་
 དད་པ་ཞེས་པ་ནི། ལས་ཆོག་རང་གི་ངོས་ནས་བདག་གཞན་གྱི་དབྱེ་བ་ཡོད་པ་སྟེ། ལས་ཆོག་
 ད་ལྟ་བུ་དང་མ་འོངས་པ་གཞིས་ཡིག་གཟུགས་ཐ་དད་ཡོད་པ་དེ་བྱ་བྱེད་ཐ་དད་པའམ་བདག་
 གཞན་ཤེད་མཚུངས་པ་དང་། དེ་གཞིས་ཡིག་གཟུགས་ཐ་དད་མེད་པ་ནི་བྱ་བྱེད་ཐ་མི་དད་པ་
 ཡིན་པར་ངོས་འཛིན་དང་འགྲེལ་བཤད་གསལ་བོར་བྱས་ཡོད། །བྱ་བྱེད་ལས་གསུམ་ངོས་

ཕ བྱིས་པའི་དགའ་སྟོན་གྱི་འབྲུང་མ། འདི་ནི་གནའ་བོའི་བསྐྱལ་པ་ཡ་ཐོག་ནས་ཉི་ཤུ་
བར་གྱི་བོད་ཀྱི་ལོ་རྒྱུས་བསྐྱད་རིམ་རྒྱན་པ་ཞིག་གྱི་འབྲུང་པ་ཐེངས་དང་པོ་ཡིན་པ་མ་

ཟད། རྒྱ་ཡིག་ཏུ་བསྐྱར་བའི་གོ་རིམ་ནང་ཏུ་བོད་ཀྱི་ཡིག་ཆ་དང་ནང་ཏུ་མེད་པར་རྒྱ་ཡིག་ནང་ཏུ་གསལ་བའི་བོད་ཀྱི་ལོ་རྒྱུས་སྐོར་མང་པོ་ཞིག་བྱར་མཆན་བཏབ་ཡོད། །

༦ ཁམས་ཀྱི་ས་གནས་ལོ་རྒྱུས་ཀྱི་བྱད་ཆོས་ནི། ལོ་རྒྱུས་ཐོག་ཁམས་ཞེས་པའི་རིག་གནས་ཀྱི་ས་ཁོངས་དེ་ཆོད་གཞི་གང་ཡིན་བོད་རྒྱ་གཉིས་ཀྱི་ཡིག་ཆ་དང་རྣམས་སུ་འཁོད་པ་རྣམས་ལྟན་ཅིག་ཏུ་སྟོགས་བསྟེན་གསུང་ཏེ་མིག་སྤར་ཁམས་ཀྱི་རིག་གནས་ས་ཁོངས་གང་ཡིན་ཐེངས་དང་པོར་གཏན་འཁེབས་བྱས་པ་ཞིག་ཡིན། གཞན་ཡང་སྡེ་དགའི་ལོ་རྒྱུས་དང་། མི་ཉག་ཁྲི་ཤིའི་ལོ་རྒྱུས་གཉིས་ནི་རྒྱ་བོད་ཡིག་ཆ་དང་གཉིས་སུ་སྤར་ཡོད་ཀྱི་ལོ་རྒྱུས་རྣམས་གཞིར་བཞག་ །དེའི་ཐོག་ཏུ་ཁམས་སྟོགས་ཀྱི་མཁས་དབང་རྣམས་ཀྱི་རྣམ་ཐར་དག་གིས་ཁ་བསྐྱངས། ཁམས་སྟོགས་ཀྱི་རྒྱ་བོད་ཤེས་ཡོན་པ་རྣམས་ལ་བཅར་འདྲི་ལུས་ཏེ་ཡིག་ཐོག་ཏུ་མ་འཁོད་པའི་ཉེ་རབས་ལོ་རྒྱུས་སྐོར་རྣམས་ཀྱང་ཁ་སྟོན་བྱས་ཡོད། །

༧ གསེར་གྱི་ལོ་རྒྱུས་ཀྱི་བྱད་ཆོས། འདི་ནི་（国家社科基金-重大项目） རྒྱལ་ཁབ་སྤྱི་ཆོགས་ཆོན་རིག་གི་གལ་ཆེན་ལས་གཞི་དང་། ཁམས་པའི་རིག་གནས་ཞིབ་འཇུག་ཁང་བྱང་འབྲེལ་གྱི་ལས་གཞི་གལ་ཆེན་ཞིག་ཡིན། གསེར་གྱི་ལོ་རྒྱུས་འདི་ནི་སྤྱི་ལོ་༡༩༠༠ ལས་མས་ཅམ་ནས་འགོ་བརྩམས་པའི་ཞང་ཞུང་གི་གསེར་གྱི་བྱད་ཆོས་དང་། བྱང་བའི་དུས་རབས་རྣམས་གནའ་བོའི་སྤྱི་རིག་གི་གསེར་གྱི་ལོ་རྒྱུས་དང་ཕན་ཚུན་གོ་བསྐྱར་གྱིས་སྟོན་ནས་དབྱེད་པ་བྱས་ཤིང་། དེ་ནས་དུས་རབས་རིམ་བྱང་རྣམས་སུ་ཞང་བོད་གསེར་གྱི་དང་། ཞང་ཞུང་བོད་བཅན་པོས་དབང་བསྐྱར་བྱས་པ་ནས་བོད་ཡུལ་སྟོད་སྟེང་བར་གསུམ་ཏུ་གསེབ་རིག་པ་མི་ལྟར་འཕེལ་རྒྱས་བྱུང་ཆུང་དང་། མཁས་དབང་གང་ཞིག་བྱོན་ཆུང་སོགས་ལོ་རྒྱུས་དངོས་གཙུག་བའི་ལྟ་བར་གཞི་བཟུང་ནས་ཞིབ་འཇུག་བྱས་པའི་བོད་ཀྱི་གསེར་གྱི་ལོ་རྒྱུས་ཡང་དག་པ་ཞིག་ཡིན། ཞིབ་འཇུག་གི་ཐབས་ལམ་གཙུག་པོ། གནའ་བོའི་གསེར་གྱི་བྱད་ཆོས་ལ་མི་རིགས་རིག་པ་དང་། གནའ་རྒྱུས་རྟོག་ཞིབ་རིག་པ། ལོ་རྒྱུས་རིག་པ་བཅས་རིག་ཆོན་ཁག་མང་བྱང་འབྲེལ་གྱི་སྟོན་ཞིབ་འཇུག་བྱས་པ་ཞིག་ཡིན།

༨ འབྲུང་ཅིས་ཀྱི་བྱད་ཆོས་ནི། འབྲུང་ཅིས་ནི་གཙོ་བོར་གནའ་བོའི་བོད་ཀྱི་དམངས་སྟོན་རིག་གནས་ཤིག་ཡིན་པ་མ་ཟད། དངོས་པོའི་ཁམས་ལ་འབྲུང་བའི་རྒྱལ་རིག་གི་རྒྱས་པ་ཞིག་ཡོད་པའི་བསམ་སྒྲོ་ཐོག་མར་རྟེན་པའི་རིག་གནས་རྟེན་པ་ཞིག་ཀྱང་རེད། དེས་ན་འབྲུང་ཅིས་ཉེར་མཁོ་བྱམ་བཟང་ནང་གི་ཆེད་སྟོད་ཀྱི་ཐ་སྟོད་རྣམས་ལ་འབྲེལ་བཤད་དང་། གོ་དཀའ་བའི་རིགས་རྣམས་ལ་རེད་མིག་གིས་འབྲེལ་བཤད་བྱས་ཡོད། དེའི་ཐོག་ཏུ་བག་སྟོན། གཤིན་ལས། ས་དབྱེད་སོགས་དམངས་སྟོན་གལ་ཆེ་བའི་རིགས་འགའ་ཞིག་ཀྱང་སྟོགས་བསྟེན་གསུང་བྱས་ཡོད། །

༩ སྐར་ཅིས་ཀྱི་བྱད་ཆོས་ནི། བོད་ཀྱི་སྐར་ཅིས་ནི་གནའ་བོའི་མེས་པོ་རྣམས་ཀྱིས་རང་བྱུང་

ཁམས་ཀྱི་རྣམ་ཚུལ་ལ་བརྟགས་ནས་སྟོགས་བསྟོན་གྱིས་པའི་ཚན་རིག་གི་གཞུང་ལུགས་ཤིག་
 རེད། དེ་བའི་འདི་ནང་གནའ་བོའི་ཁང་ཁུང་རྒྱ་པོའི་དག་ཅིས་སྟགས་རང་བྱུང་ཁམས་ལ་
 དབྱུང་པའི་གནམ་གཤིས་རིག་པ་དང་། དཔལ་དུས་ཀྱི་འཁོར་ལོའི་སྐར་ཅིས་ལཱ་བོད་ཡིག་དུ་
 བསྐྱར་བའི་གངས་ཅིས་སྟོན་གཟུང་སྐར་གྱི་ལའི་རྒྱུང་འགྲོས་(公转) དང་། རང་འགྲོས་(自
 传) ཀྱི་ལྷན་སྐུལ་གྱི་གངས་ཚད་ནམས་ཨང་གངས་དང་སྐྱར་ནས་བོད་ཀྱི་ལུལ་དུས་དང་བསྐྱར་
 པའི་དུས་ཀྱི་གནམ་གནམ་དབྱུང་གཏན་འབེབས་བྱེད་ཐབས་ཤིག་རེད། དེ་བའི་འདི་ནང་དུ་གཙོ་
 བོའི་བྱུང་ཚུལ་དེ། ལྷ་བསྐྱུས་དང་། གཟུང་ལྷ། ཞག་གསུམ་རྣམ་དབྱེ། གྱི་ལའི་རྣམ་བཤད་
 བཅས་དང་རབས་ཅིས་རིག་གི་ཨང་ཅིས་ཀྱི་སྒྱི་འགྲོས་ཆ་ཚང་ཞིག་བཞེད་ཡོད། གཞན་ཡང་
 དུས་ཕྱིས་རྒྱ་དཀར་ནག་ནས་བསྐྱར་བ་དང་། བོད་ཀྱི་དམངས་ཁྲོད་ཀྱི་ཚོང་ས་དང་ཀྱི་བསམ་སྟོ་
 སལ་ཆེར་སྤར་དོར་བྱས་ཤིང་། གནམ་ས་གྱི་ལའི་ཆགས་ཚུལ་དང་ཉི་མུ་གཟུང་འཛིན་སྐོར་
 རྣམས་དང་རབས་གནམ་ས་གྱི་ལའི་རྣམ་བཤད་དང་གཅིག་གྱུར་བྱས་ཡོད། །

༡༠ གསེ་བ་རིག་པའི་རྣམ་བཤད་ཀྱི་བྱུང་ཚུལ་ནི། དང་པོ། བོད་ཀྱི་གསེ་རིག་གཞུང་གི་
 ཉེས་པ་གསུམ་(三因) དང་། འབྱུང་བ་བཞི་(四大元素) རྣམས་དང་རབས་གསེ་རིག་ནང་
 གི་རྣམས་རིགས་དང་སྐྱར་ནས་འགྲེལ་བཤད་བྱས་པའི་དཔེ་དེ་བཞོག་མ་དེ་ཁོ་བོའི་དཔེ་ཆ་འདི་
 ཡིན། སྒྱི་ལོ་༡༩༧༧ལོར་ཁོ་བོ་སྤྱི་ལུ་ལ་བོད་སྐད་སྟོན་བྲིད་བྱེད་སར་འགྲོ་སྐབས། དེའི་གོང་གི་
 ལུལ་སྒྱི་ནང་གཉིས་སུ་བཞུགས་པའི་བོད་ཀྱི་སྐད་པ་རྣམས་ཀྱིས་ཉེས་པ་གསུམ་དང་། འབྱུང་བ་
 བཞི་ཟེར་བ་དེ་ལུས་ཀྱི་ནང་གི་རང་བཞིན་གྱི་རུས་པ་ཞིག་ཡིན་པ་ཅམ་ལས་རྣམས་རིགས་ཡིན་
 པར་འགྲེལ་བཤད་བྱེད་ཤིང་མཁན་སུ་ཡང་བྱུང་མི་འདུག །རྒྱ་མཚན་དེས་བོད་སྐད་ལ་ཞིབ་
 འཇུག་བྱེད་མཁན་སྤྱི་ལུ་ལ་རྣམས་ཀྱིས་དེའི་སྐོར་ལ་འདྲི་བཅུད་མང་པོ་ཞིག་བྱུང་བར་བརྟེན།
 ཁོ་བོས་འདི་དག་ནི་དང་རབས་གསེ་རིག་གཞུང་དུ་བཤད་པའི་ལུས་ཀྱི་ལུས་ཆའི་ནང་གི་འབྱུང་
 བའི་སྤྲ་རྣམས་(微量元素) ཟེར་བ་འདི་དང་གཅིག་པར་ཡིན་པ་ཤིས་ནས་འགྲེལ་བཤད་བྱས་པ་
 ཞིག་ཡིན།

གཉིས་པ། བོད་སྐད་གཞུང་གི་མངལ་ཆགས་པའི་དུས་དང་དང་རབས་ལུགས་གཉིས་རྒྱུ་
 འགལ་ཏག་ཏག་བྱུང་ཡོད་པ་རེད། ཁོ་བོས་ཡིག་འབྲུ་གཅིག་གི་འགྱུར་བ་ལ་བརྟེན་ནས་བོད་
 ལུགས་དང་། དང་རབས་ལུགས་གཉིས་མངལ་ཆགས་པའི་དུས་ཚོགས་གཅིག་མཐུན་དུ་དོས་
 འཛིན་བྱས་ཡོད། བཤད་རྒྱུ་ལས། མངལ་ཁ་བྱེ་ནས་ཞག་ནི་བཅུ་གཉིས་པར། ཞེས་དང་
 རབས་ལུགས་ཀྱི་མངལ་ཆགས་པའི་དུས་དང་རྒྱུ་འགལ་བྱུང་བ་དེ། བར། པར་ལ་བསྐྱར་
 པས་དང་རབས་ལུགས་དང་ལྷ་ཚུལ་གཅིག་མཐུན་བྱུང་ཡོད། །

གསུམ། ཟུར་མཁར་བ་དང་། དེལ་དམར་བ་རྣམས་ཀྱིས་སྐད་རྣམས་ཀྱི་དོ་བོ་འབྱུང་བ་ས་

ཆུ་མི་རྒྱུ་རྒྱུ་ལ་ཕན་ཚུན་འདུ་འབྲུ་མི་འདྲ་བའི་དབང་གིས་རྒྱས་པ་(药效)དང་། ཡོན་ཏན་
 (功能)མི་འདྲ་བར་རྒྱུར་པའི་རེའུ་མང་པོ་ཞིག་ཡོད་པ་གསུངས་ཡོད་ཀྱང་དེར་རྒྱས་ཆེད་
 དཀའ། དེས་ནས་ཁོ་བོས་བཤད་རྒྱུ་འགྲེལ་པ་《མིས་པོའི་ཞལ་ལུང་》དང་། བོན་གྱི་གསོ་
 རིག་ཡིག་ཚང་《འབྲུམ་བཞི》 འབྲུག་པ་པད་དཀར་གྱི་བཤད་རྒྱུ་འགྲེལ་པ་《གཞན་ལ་ཕན་
 པའི་གཏེར་》ནམས་ཕན་ཚུན་གོ་བརྒྱུར་བྱས་ཏེ། བཞེད་པ་མི་འདྲ་བ་ཡོད་པ་རྒྱུས་སོ་སོར་
 བཞོད་དེ་འབྲུང་བའི་རྒྱས་པ་རེའུ་མིག་བརྒྱ་དང་ར་བཞི་ཅན་(元素周期表)སོགས་རེའུ་མིག་
 གསར་པ་འགའ་ཞིག་གསར་བཅོ་བྱས་ནས་དཔེ་སྟུན་བྱས་པ་ཡིན། །

༡༡ དབྱིན་ཡིག་རྒྱ་བྲིས་པའི་བོད་སྐད་གྱི་བྱད་ཆོས། འདི་ནི་《བོད་སྐད་འབྲུང་རྒྱས་ཞིབ་
 འཇུག》(书名——藏医元素研究)། ཅིས་པ་འདི་ནི་ཕྱི་རྒྱལ་བ་རྒྱམས་ལ་བོད་སྐད་རྒྱ་རྩོད་
 བྱེད་བདེ་བའི་ཆེད་རྒྱ་རྒྱུ་མཁྲིས་བད་ཀན་གསུམ་པ་དང་། འབྲུང་བཞི་རྒྱས་པ་བརྒྱད་། མེ་
 རྫོད་། ལས་རྒྱུ་དང་། ཡི་རྒྱུ་སོགས་ཀྱི་ལྷན་གྱི་གྲུབ་ཆའི་འབྲུང་བའི་རྒྱས་རྒྱུས་ཀྱི་
 རྒྱས་འཇུག་དང་། རྒྱུ་དངོས་ཀྱི་མིང་རྒྱུས་ལེད་སྟུང་ཅིང་། འཆད་བྱིད་བྱས་པའི་བེན་བྲིས་
 རྒྱུས་ལྟན་ཅིག་རྒྱ་བརྒྱས་པ་ཞིག་ཡིན། །

༡༢ བོད་རིག་པའི་རྒྱུ་བཤད་ཀྱི་བྱད་ཆོས། འདི་ནི་ཀྱང་དབྲུང་མི་རིགས་སློབ་གྲྭ་ཆེན་མོའི་
 211ལས་གཞི་ཞིག་ཡིན། བརྗོད་དོན་གཙོ་བོར་བོད་ཀྱི་ལྷན་ཁམས་དང་། མིའི་འགྲོ་བ། རིག་
 ཀནས། ལྷན་སློབ། རི་རྒྱ་སོགས་མདོར་བསྟུས་པའི་སློབ་ནས་རྩོད་བྱས་པ་ཞིག་ཡིན། འདི་ནི་
 རྒྱུ་རྒྱུ་ཆེད་མའི་སློབ་འདི་ནི་ཀྱང་དབྲུང་མི་རིགས་སློབ་གྲྭའི་སློབ་དཔེ་ཆེད་རྒྱ་ས་པར་ཆེད་མ་
 རིགས་གཏེར་གྱི་རབ་བྱེད་ཐོག་མ་བཞིའི་འགྲེལ་བཤད་དང་རིགས་ལམ་རྒྱུས་ར་སློབ་མཁན་
 པོ་ཐུབ་ནོར་གྱི་མཐུན་ནས་ཐོབ་པའི་ཞལ་གསུང་རྒྱུས་བེན་བྲིས་བཏབ་པ་ཞིག་ཡིན། འདི་ནི་
 རིགས་ལམ་སློབ་རྒྱུས་རྒྱུ་རྒྱུ་ཆུ་བྲག་འགོ་དགེ་བཤེས་སློབ་བཟང་དོན་གྲུབ་ཀྱི་རིགས་ལམ་གྱི་
 ལྷན་སྟུང་། བརྗོད་བྱ་སྟུམ་རྒྱགས་གཉིས་པོ་ཆ་ཆེད་བ་ཞིག་བཞོད་ཡོད་པ་འདི་ནི་བསྟུས་རའི་
 རིགས་ལམ་ནང་རྒྱ་སྟུང་མེད་པའི་བྱད་ཆོས་ཞིག་ཡིན། །

༡༣ ཟབ་མོ་ནང་དོན་གྱི་འགྲེལ་པའི་བྱད་ཆོས། གསར་སྟགས་ནང་གི་རྩོགས་རིམ་གྱི་
 སྐབས་སུ་ཅ་ཐིག་རྒྱུ་གསུམ་གནད་རྒྱ་བརྒྱན་ཏེ་ལྷན་སྟུང་བྱེད་པ་ལ་ལྷན་དངོས་པོའི་གནས་
 ལྷན་ཤེས་དཔོན་པ་ནི་མ་ཏ་ཅང་གལ་ཆེན་ཞིག་རེད། ལྷན་སྟུང་འདི་ནི་སྟུང་ལྷན་སྟུང་
 གསར་རྒྱ་མ་བྱས་པར་ཀན་པོ་རྒྱུས་ལ་ལྷན་ཁམས་བདེ་ཐང་གི་ཆེད་རྒྱ་ལག་ལེན་གྱི་མཐུན་
 རྒྱུ་བརྒྱན་ན་རིང་འཆོ་ཆོ་ཡི་བཅུད་ལེན་གྱི་ཡན་ལག་ཅིག་རེད། འོན་ཀྱང་ལོ་རྒྱུས་ཐོག་ལྷན་
 དངོས་པོའི་གནས་ལྷན་ཤེས་མཁན་གྱི་མཁས་པ་རེ་བྱུང་ལས་བྱུང་མི་འདུག །ཀམ་པ་རང་
 བྱུང་དོན་རྩི་དང་། རྒྱར་མཁར་པ་སློབ་སྟུང་ལོ་སོགས་སྐད་སྟགས་གཉིས་ཀ་ལ་མཁས་པ་རེ་

འགའ་ཕུང་ཡོད་པ་དེ་དག་ནི་གསང་སྐྱབས་ཉམས་ལེན་ཅན་གྱི་ནུལ་འཁྱོར་པ་འབྲུལ་མེད་ཡིན་པ་སྒྲིམ་མ་དགོས། འོན་ཀྱང་ཐོད་ཀྱི་བསྐྱེལ་བྲིད་པལ་ཆེར་སྟོང་སྟོམ་ཅམ་ལས། ལུས་ཀྱི་ནང་གི་ཆ་དབུ་རྒྱུ་རྩེ་གསུམ་ཅམ་ཡང་ངོས་འཛིན་ཡང་དག་པར་བྱེད་ཐུབ་མཁན་དགོན་པོ་ཞིག་ཆགས་ཡོད་པ་རེད། དེས་ན་འགྲེལ་བཤད་འདིའི་ནང་གི་ཆ་དབུ་རྒྱུ་རྩེ་གསུམ་དང་། ཐོད་ཀྱི་གསོ་བ་རིག་པའི་གྲུབ་པ་ལུས་ཀྱི་ལུ་དང་། དེ་བཞིན་དུ་ལུས་ཀྱི་སྒྲིགས་བཞི་མཚམས་བརྒྱད་ལ་གནས་ཤིང་ཡན་ལག་གི་རྒྱུ་ལྟ་བུའི་ལམ་གྱུར་པའི་ཆ་སུམ་བསྐྱོར་མ་དང་། རྒྱལ་བའི་ཆ་དང་། ཀྱན་འཕྲངས་མ་དང་། དབང་པོའི་ཆ་རྣམས་སོ་སོ་གང་ཡིན་ཅུབ་ལུགས་གསོ་རིག་དང་རྒྱུར་ནས་ངོས་འཛིན་བྱས་ཡོད། །

༡༥ མཐའ་དབུད་སེང་གའི་ང་རོ་ནི། མི་ལོ་སུམ་ཅུ་ཅམ་གྱི་རིང་ལ་རང་གི་འོས་འགན་གྱི་སྟོབ་ཚན་ལོ་རྒྱུས་དང་། བར་སྟོད་སྐོགས་ཀྱི་རིག་གཞུང་རྣམས་ལ་ཞིབ་འཇུག་བྱས་པའི་དབུད་སྟོམ་རྣམས་ C རིམ་པའི་རིག་གཞུང་དུས་དེབ་དང་། སྟོག་ཤིང་གི་རིག་གཞུང་དུས་དེབ (C 刊有、核心刊物) རྣམས་སུ་བཀོད་ཅིན་པ་ཁག་གཅིག་སྟོགས་བསུས་བྱས་པ་ཞིག་ཡིན། དེ་ལྟར་མི་ལོ་བཞི་ཅུ་ལྷག་ཅམ་གྱི་རིང་ལ་ཐོད་ཀྱི་རིག་གཞུང་ལ་ཞིབ་འཇུག་བྱས་པའི་འབྲས་བུ་དེ་དག་ལས་མིག་སྒར་སྟེ་ཆོགས་སྟོག་བེད་སྟོད་ཡོད་རིགས་རྣམས་ལོ་སྟོན་པའི་ཆོག་གིས་བཀལ་ཡོད་པ་འདི་ཡིས་ཐོད་རིགས་གཞོན་ཅུ་རྣམས་ལ་སྟོ་སྟེད་ཅུང་ཟད་སྟོབ་པའི་གསོས་སྒྲན་དུ་འགྱུར་བའི་རེ་སྟོན་དང་། རྩི་རབས་ཐོད་རིགས་གཞོན་ཅུ་རྣམས་ཀྱིས་དབུད་གཞི་དང་། བསྟོ་སྟེང་གི་གར་སྟེགས་ཤིག་དུ་འགྱུར་བའི་རེ་སྟོན་ཡོད། གཞན་ཡང་གཞོན་ཅུའི་སྐབས་སུ་སྟོབ་སྟོད་བྱས་པའི་ནང་ཆོས་ཀྱི་གཞུང་ཀ་ཐོད་རྣམས་ལས། དབུ་མ་འཇུག་པ་དང་། སྟོད་འཇུག་སྐོགས་ལ་ཆོག་འགྲེལ་ཅམ་ཞིག་བྲིས་ན། པལ་ཆེར་དེར་དུས་མཁན་སྟུལ་ལ་སྐོགས་གྲགས་ཆེན་འདི་དག་གིས་བྲིས་པའི་གཞུང་འགྲེལ་གྲགས་པ་དེ་དག་ལས་གོ་བདེ་བ་ཞིག་འཁྱི་ཐུབ་ཆོད་འདུག་གྱུར། རང་རྒྱུད་ལ་ཉམས་ལེན་མེད་པའི་ཁ་བཤད་སྟོང་པས་གཞན་ལ་ཕན་ཐོགས་དཀའ་བ་སྟམ་ནས་རེ་ཞིག་བཏང་སྟོམས་སུ་བཞག་པ་ཡིན། ད་ལན་དཀའ་མཛོས་ཐོད་རིགས་རང་སྟོང་ཁུལ་ཁམས་པའི་རིག་གནས་ཞིབ་འཇུག་ཁང་གི་དབུ་བྲིད་རྣམས་ཀྱིས་དཔེ་ཆོགས་འདི་ཉིད་པར་སྒྲན་དང་འགྲེམ་སྟེལ་གནང་རྒྱུ་རྒྱུ་སྟོར་ཐོབ་པ་ལ་སྟོང་ཐག་པ་ནས་ཐུགས་རྗེ་ཆེ་ཞུ་གྱིན། ཞེས་ཐོད་ཀྱི་རིག་གཞུང་སྟོབ་པའི་རྒྱལ་ཁམས་པ་ཐུབ་བསྟན་ཐུན་ཆོགས་དེས་སྟོན་ཅུབ་མི་རིགས་སྟོབ་གྲ་ཆེན་མོའི་རང་ཤག་དུ་བྲིས་སོ། །

内 容 提 要

非为大师与大官，
云游四海求学问，
一生钻研诸文献，
获得不少新观点。

儿时隐蔽听旧学，
青年云游长见闻，
融合古今探藏学，
汇成文集十四册。

登上宝座说道法，
抄袭古文弄玄妙，
糊涂论说蒙自他，
此说非同他人说。

陋室书籍堆如山，
积累妙语如觅食，
此无过目费解语，
此论非同他人论。

求取知识之精华，
找出智慧之真谛，
字字经过深思书，
故为心血之结晶。

我小时候，遭遇文化大革命运动，学习文化知识必须得隐蔽。我秘密拜唐拉泽旺、夏切彭德、元登彭措、元登巴桑、嘎玛色巴等著名藏族大学者们为师，系统地学了藏文文法、藏文修辞学、藏族历算、藏医藏药等藏学通用学科理论，以及五部大论、内观三续、功课仪轨等

少量的佛教理论。改革开放以后，我到四川省藏文学校，系统地学习了藏族传统文化十明学科的理论知识。公元1986年，我毕业分配到北京中央民族大学任教，成为一名普通的高校教师。公元1994年至今，我有幸赴欧洲、北美等西方众多的大学，陆续开展学术访问、学术交流和学术研究工作，我的学术视野得以拓宽，我的现代文化和学术观念得以成熟，我因此步入了新的学习与研究之路。此后，我能够把藏族传统文化和世界其它文化对比起来研究，能够对藏族传统文化做取其精华和去其糟粕的研究。我先后撰写《藏文文法》等藏学理论著作，尽最大可能地用现代科学理论来诠释藏族传统学科知识，使其跟上现代文明发展的步伐。

今天，我再次仔细修改完善我的所有文章和著作，其中符合现代科学理论的观点和说法没有作变动，因为时代背景原因出现明显违背现代科学理论的错误观点和错误说法，作了修改与完善。我的所有文章和著作，都经过了文献依据与逻辑理论的再三推敲，应该具有非同一般的特色。

1 《藏文文法通论》：在继承《司徒文法》当中文法释难理论的基础上，《藏文音势论》当中的及物动词与不及物动词的分别方面，经过仔细研究《司徒文法》当中的相关理论与列子，得出新结论是：动词本身在现在式与未来式当中有变化，则为及物动词；动词本身在现在式与未来式当中没有变化，则为不及物动词。我把藏文文法当中的动作、作者及能所与现代语法当中的主语、谓语及宾语结合起来诠释，很好地排除了其中的疑惑与困难。

2 《藏文文论与诗学明鉴》：对《诗学明镜》进行通俗易懂的阐释之余，语音多义的修辞手法等难点，结合珠康楚的《修辞学明镜注释》与居米旁的《修辞学明镜注释》等的观点，作了仔细深入地阐释。在解读博克巴的《修辞学明镜列子诗句》方面，结合作者的时代历史文化背景作了具有充分说服力的还原释读，其中的隐喻诗句，根据恩师唐拉泽旺的讲解，作了正本清源的解读。

3 《藏史纲要》：以世界历史为时空背景，把藏族历史纳入现代世界历史的理论框架内，以全篇九章的大信息量创新性地诠释了藏族历史。为了撰写这部新的历史著作，我查阅了藏传佛教本教与班迪（指

非本教的宗派)等各宗各派的大量文献,研究了汉文史籍和英文史书当中与藏族历史有关的文献资料,研究了大量的考古文物,最终形成了这部叙述藏族六千余年文明发展史的历史著作。

4.《藏史简论·少年史纲》:是《藏史纲要》的通俗浓缩版,主要是为了满足藏史初学者们学习藏族历史知识的需求而编写。减掉大量的文献引用、繁复的理论解释和复杂的逻辑论证之后,以少年儿童容易接受的话语,娓娓道来藏族文明发展历史的大致脉络。

5.《藏史简论·少年史纲》:汉文版:这是第一本描绘藏区从原始社会到近现代发展的通俗史学作品。本书对照汉藏文献,在翻译的过程中增补了许多藏文史书并未记载却可见于汉文史书的一些珍贵的历史资料。

6:《康巴地区史》:从藏汉历史文献中寻找康巴的文化区域,叙述康巴地区的人文史。其中德格地方史与木雅西夏史方面,在研究梳理藏汉史书中相关记载的基础上,查阅和研究众多相关人物的传记作了文献依据的补充。除此之外,访问康巴地区名人和学者,对康巴地区的近代史作了补充。

7《藏医药历史》:这部著作是我承担国家社科基金重大项目与康巴文化研究院科研项目的成果之一。藏医药起源于公元前1800年左右的古代象雄地区(今西藏阿里及周边地区),其与古代希腊医药学有不少相似之处,我把这两者联系起来作了对比研究。针对古代象雄邦国并入吐蕃帝国之后,藏医药学怎样传播到藏区各地,期间整个藏区出现了哪些藏医药大师等问题,我严格按照历史唯物主义观点和方法,仔细梳理和研究现存文献资料和文物后,给出了符合科学规律的解答。

8《藏族民族与元素历算教程》:元素算在藏区具有悠久的起源发展历史,是非常重要的藏族民间文化。针对《元素算相关知识宝瓶》当中疑难术语,我作了通俗易懂的解释,并且配有令人耳目一新的表格。除此之外,我还增加了《婚事元素算》、《丧事元素算》、《风水知识》等相关文献诠释。

9《藏族楚派历算通论》:历算是藏族先辈经过长期观察大自然种种现象,不断总结经验后形成的一套科学理论知识。这部著作里,通过正确解读《象雄古历算》当中的观察自然天文历算理论,以及译成

藏文之《时轮金刚历算》当中的行星公转与自转的速度计算法等，结合藏区特有的季节变化与气候规律推出了符合青藏高原地域的历算解说。其中，舍去了晚期从印度和汉地翻译过来的迷信说法，增加了现代科学解释宇宙起源、星球运行、日食月食等的理论知识。

10《藏医药学人体与疾病研究》：一、经过长期研究后，我首次提出了结合古今中外医药学的藏医三因、四大元素诠释论。公元1994年，我到国外传授藏医藏药理论与实践的时候，国内外还没有把三因和四大元素解释清楚，且误认为它是人体的某种能量或功能，不清楚它是人体的物质元素。针对种种疑惑和提问，我向国内外藏医药研究人员，从微量元素论的角度详细解释了藏医三因、四大元素理论。二、以前，藏医的胚胎形成时间论与现代医学胚胎形成时间论有矛盾。我通过一个字的改写纠正，把藏医的胚胎形成时间论与现代医学胚胎形成时间论做到完全一致的解读。三、藏文文献记载，苏喀巴与迪玛巴就藏药的地、水、风、火属性不同，合成药物服用后产生不同的药效与功能的问题，造有一目了然的图表。可是今天的我们找不到这些图表，我根据《藏医释续注疏先辈导言》、《本教四部医经》、珠巴·白玛噶波所著《释续注疏》等文献的比较研究，重新汇编出版了104格的藏医元素周期图表。

11《藏医元素研究》英文版：本书主要是面向国外学者与学生讲解藏医学中人体构造，物质元素论和藏药药材元素成分论等讲稿的汇编。

12《藏学概论》：本书是中央民族大学的211项目，主要探讨了藏区地理、人文、民俗文化、山水文化等。因明学部分是用于中央民族大学教学教材，其中重点阐释了萨迦大学士《理量宝藏论》前四章的要点，逻辑论证源于恩师然果·图诺堪布的讲课笔记，辩证法源于炉霍格西洛桑丹珠的讲课笔记。把藏文文法理论纳入因明逻辑框架里面，是本书的一大特色。

13《人体与心理》：是一种保健医学的辅读物，修炼密宗深密圆满次第时，知晓气、脉、明点所在身体的内外结构、运动规律等极为重要，以前这些都处于保密当中，为了帮助老年朋友通过身心锻炼达到健康的目的，我作了公开的著书解释。过去，真正知晓人的身体结构与活动规律的学者不多，噶玛巴·让炯多吉和苏喀·洛珠加波二者

是其中的佼佼者，他们无疑属于密宗瑜伽行者。藏区的诸多修行开示法，强调观修空性，清楚知晓人体内左、中、右三脉的也不多。我在本书中，结合现代西医理论阐释了人体的左、中、右三脉，藏医的人体结构论，气在人体各个部位运行的通道，神经网络的布局和功能作用等。

14《思辨狮子吼》：本书收录有本人近30年教学科研成果，主要是藏族历史与藏文文法等的研究论文。系已经发表在各类学术C刊及核心期刊当中的论文。

本人近40年从事藏学与藏族文化研究的成果，为了使藏族青年学子们容易理解，都作了通俗易懂的阐释。希望这部文集能够成为未来藏族青年学子们的重要参考资料，以及经常进行讨论的焦点。本人年轻的时候系统学习过佛教理论著作《入中观论》、《入菩萨行论》等，对这些论著作一个浅显易懂的阐释，可以胜过现在很多的活佛与堪布，但是没有经过亲自修持与具备修炼经验的夸夸其谈，并不能帮助他人，所以没有做徒劳的事情。

我要衷心感谢甘孜州康巴文化研究院，将我毕生从事教育教学与学术研究的成果，集成研究文献出版发行。

土登彭措

书于西南民族大学家中

Abstract

A Tibetan world vagabond who has never obtained
Such status as an enthroned lama or high official,
The core of my life immersed in the swamp of textual archives,
Finding new perspectives from within old texts.

I interpreted and explained Tibetan culture and knowledge
By synthesizing in fourteen distinct volumes
The traditions I learned secretly in my childhood
And the things I saw and heard while traveling the world in my youth.

These books are unlike contemporary scholar productions,
Such as religious preaching with symbolic gestures from high thrones,
Or the copying of ancient scriptures by today's students
Without understanding those difficult points themselves.

They are unlike contemporary scholarly research,
Such as piling up textual archives like mountains in offices,
Compiling diverse papers like various grains,
Which can be viewed with one's eyes, but not seen with the brain

They are instead scholarly works produced with warm blood,
Extracting all the fields of knowledge as its marrow,
Seeking the fundamental reality from the matrix of wisdom,
And each syllable running through brain's neural pathways.

At a young age, I had the opportunity to familiarize with the common fields of Tibetan knowledge such as linguistics, literature, astronomy, and medicine and Buddhist fields of knowledge such as the Five Volumes of Sutra, Tibetan commentaries of Tantra such as the Profound Inner Meaning by the Third Karmapa, as well as ritual practices through studying secretly with my main teacher Thanglha Tsewang, Kyapché Pendé, Yönten Pelzang, the then lead-chanter Zöpa, and so forth during the 1960-70s. During the Reform and Opening era, I have studied Tibetan traditional fields of knowledge systematically at the Sichuan Provincial Tibetan School. In 1986, right after graduation from the school, I was recruited to teach at the Central University for Nationalities (now Minzu Univeristy of China) in Beijing. Since 1994, I have been able to visit many universities in the West, such as Europe and North America, to carry out academic exchanges and research. Therefore, I was able to study and research the ways of modern knowledge systems and their development, through and against which I have compared and analyzed Tibetan knowledge traditions to sustain and improve them. I

thus have attempted to offer new interpretations on Tibetan culture and knowledge according to the contemporary sciences and epistemologies in this collection of writings.

In particular, I have kept the views and interpretations in Tibetan knowledge traditions that are accordant with modern scientific understandings intact while improving the outdated understandings and misconceptions that contradict the scientific views today. The books are further produced with thorough analysis through the means of logics and citations. Each book thus has its own unique characteristics, which I have briefly introduced below:

Book 1, Commentary of Tibetan Grammar

This is mainly a commentary on the difficult points in the Sidu's Grand Commentary of Tibetan Grammar. Particularly, after having carefully analyzed Sidu's point that whether or not "action" (bya) and "agent" (byed) are separable (tha dad pa) is equivalent to whether or not "self" (dbag) and "other" (gzhan) forms of a verb has the same capacity (shed mtshung pa) and the examples he gave in his Grand Commentary, I have concluded and explained clearly that a verb that is "tha dad pa" can be understood as a verb's "self" and "other" forms has the same capacity, that is, if the verb has different present and future forms it is a separable or "tha dad pa" and its "self" and "other" forms have the same capacity. If the verb has the same form of present and future tenses, it is then inseparable or "tha mi dad pa". Additionally, I have identified the categories of bya or action, byed or agent, las or object in Tibetan grammar as verb, subject, and object in modern linguistics respectively, which should have clarified some of confusions and difficulties in Tibetan grammar.

Book 2, Commentary of Mirror of Poetry and Tibetan literature

This book offers a concise and simple interpretation on the root text of Mirror of Poetry or snyan ngag me long ma. Particularly, I use commentaries by Druk Khamtrül and Ju Mipam to elaborate on certain embellishments that are considered more difficult in general. Another unique feature of the book is that it openly documents the historical contexts of all the examples and riddles written by Ju Mipam that I have orally received from my teacher Thanglha Tsewang.

Book 3, The Ruby Lotus Key: A Comprehensive History of Tibet

This book has exemplified a new way of historical writing in the history of Tibet as it presents Tibetan historical texts and narratives in the contemporary frameworks of historiography. It engages a wide range of source materials including Tibetan archives of both Buddhist and Bonpo sources, Chinese archives on Tibet, sources written in English as well as archeological artifacts excavated in Tibet to represent the history of Tibetan civilization spanning 6,000 years.

Book 4, The Celebrations of Children: A History of Tibetan Civilization

As a branch of the History of Tibet, this book is intended for elementary Tibetan students. Therefore, it synthesizes the main arguments from *The Ruby Lotus Key* in simple and colloquial Tibetan. Like other Tibetan literary treatises, the book is also unique in providing root texts written in verse followed by commentaries of the root text in prose.

Book 5, A History of Tibetan Civilization (Chinese Translation)

This book consists of not only the translation of *The Celebrations of Children: History of Tibetan Civilization* but also of interpretations of and annotations on the accounts of Tibetan imperial history that are only available in Chinese language in the *New and Old Books of Tang* and *Zizhi Tongjian* (*Comprehensive Mirror in Aid of Governance*).

Book 6, The Regional History of Kham

This is the first scholarly work that demarcates the cultural region of Kham based on the previous accounts of Kham as a cultural region in Tibetan and Chinese historical sources. In addition to the history of Degé Kingdom and Minyak Tangut Empire that are available in Tibetan and Chinese accounts, biographies of Tibetan scholars from Kham are used to supplement the writing of this regional history of Kham. Furthermore, I have conducted interviews with elite figures and intellectuals of the region to compose the recent history of Kham.

Book 7, History of Tibetan Medicine

This is a result of a major national project funded by the Chinese National Social Sciences Foundation and collaborated with the Institute of Kham Cultural Studies. I have analyzed the history of Tibetan history that began in approximately the year 1800 BCE in Zhangzhung Empire and its development by comparing it with the history of Greek medicine in this book. Using historical materialism approach, I then attempted to present an objective account on the development of Tibetan medicine and the important learned medicinal doctor/scholars lived in Zhangzhung and Tibet before and throughout Tibet once Zhangzhung was incorporated into Tibet during imperial Tibet.

Book 8, The Nectar Stream: An Exposition of Tibetan Elemental Astrology

Tibetan elemental astrology is a folk culture that has roots in ancient Tibetan society. I have interpreted and explicated the terminologies and difficult tabulates in the *Virtuous Vase of the Necessary Elemental Astrology* ('byung rtsis nyer mkhor bum bzang) as well as compiled important aspects of the Tibetan elemental astrology regarding wedding, funeral, and geomancy.

Book 9, The Earthly Radiance: An Exposition of Tibetan Tshur Astronomy

Tibetan astronomy is a science that our ancestors have articulated through long term observations of natural phenomena surrounding them. I have determined the ways to

measure and interpret time and seasons that are unique to the Tibetan plateau based on Tibetan accounts of old astronomies such as the Oral Astronomy of Zhangzhung Elders and the calculations of orbital speeds of stars' rotation in Kalachakra astronomy. Additionally, I have cleared the misconceptions in the later astronomy texts that were translated from India and China and incorporated the contemporary astronomical studies of stars and the universe.

Book 10, The Radiance of Snow Mountains: An Exposition of Tibetan Medicine

There are several special features to this work: First, this is the first book that explains the concepts of three humors (nyes pa gsum) and four elements ('byung ba bzhi) in Tibetan medicine in comparison to chemical elements in the western medicine. Tibetan medicine doctors in and outside of the country had always understood three humors and four elements of Tibetan medicine only as internal abilities of one's body not as chemical elements prior to 1994 when I started to teaching Tibetan medicine in western universities. As a result, foreign researchers of Tibetan medicine have persistently inquired about it. I thus have argued that the three humors and four elements of Tibetan medicine are similar to microelements in the western medicine. Secondly, I have corrected a serious contradiction with regard to the time of embryonic formation in Tibetan medicine and the western medicine by simply changing one syllable in the Tibetan medicine text, namely, changing བར (of མངལ་ཁ་བྱེ་ནས་ཞག་ནི་བརྩ་གཉིས་བར།) into བར། in the Instructional Tantra (bshad rgyud). Thirdly, I have created charts of elemental combinations of medicinal materials and their efficacies. Although Tibetan medicine scholars such as Zurkharpa and Delmarpa have mentioned the existence of charts detailing medicinal abilities and efficacies of different elemental combinations, such charts are hardly available today. I thus have compiled a chart consisting of 154 frames that documents the different views on elemental combinations and their abilities by comparing and contrasting various commentaries of Instructional Tantra such as Oral Instructions of Ancestors (mes po'i zhal lung) and *Drukpa Pékar's Commentary* of Instructional Tantra ('brug pa pad khar gyi bdad rgyud 'grel pa) as well as Bumzhi medical texts of Bon tradition.

Book 11, Elements for the Study of Tibetan Medicine

This is a collection of lectures that I have given to foreign scholars and students on elements of human body and elements of medicinal materials in Tibetan medicine tradition

Book 12, A General Introduction to Tibetan Studies

As a part of "project 211" at the Minzu University of Beijing, this book generally introduces Tibetan geography, the history of human inhabitation in Tibet, Tibetan civilization, customs, and landscape and ecological systems. In particular, the chapter on Tibetan epistemology is based on my own notes on teachings of Sakya Pandita's

Treasury of Epistemology by Khenpo Rakor Thubnor. The path of reasoning in this perspective is alike that of Drango Geshe Lobsang Dondrub. It is also unique in including a complete grammar session in the path of reasoning in the elementary level of Tibetan epistemology.

Book 13, The Illuminating Mirror: On the Relationship Between Body and Mind

In the generation stage of Tantric practice, it is very important to understand the ways of material body when doing bodily practices by pressing key points of channels (rtsa), essence (thigle, and wind (rlung). Unlike previous traditions of restraining the access to these practices, if they are made available to ordinary people, it could benefit their health and quality of life. However, there were only a few scholars who have really mastered the ways of how material body work in Tibetan history. It is undoubtful that masters such as Kamarpa Rangjung Dorjé and Zurkhar Lodrö Gyelpo were truly great masters of medicine and Tantric practices. However, most of the Tibetan meditation teachings are on the nature of emptiness; few can correctly identify the different channels (tsa dbu rkya ro). Therefore, I have explained the three main channels, anatomy of human body in Tibetan medical texts, and various other channels through which five winds travel from four cardinal directions and eight intermediate directions of the body along with modern western medicine.

Book 14, *A Lion's Roar: A Collection of Academic Papers and Public Scholarship*

This book is a collection of academic papers that are the results of my teaching and researching for over 30 years in the academy. Many of them have been published in key academic journals before.

In conclusion, in these books, I have tried to make the scholarly work of my past 40 some years on Tibetan culture and knowledge systems that are valuable for today's society accessible to the public. It is my hope that they will become a source of courage and enlightening for young Tibetans and that they will serve as a platform for intellectual analysis and discussions for the future generations of Tibetan people. Additionally, I may be able to write a commentary on the Buddhist main teachings such as Introduction to the Middle Way and Ways of Bodhisattva based on my studies in youth that is more accessible than many of the commentaries written by contemporary reincarnated lamas and Khenpos. However, due to my lack of actual practices of these teachings, a commentary from mere intellectual understandings will be unlikely useful, I thus put it aside for now. I

sincerely thank the Sichuan Ganzi Prefecture Khampa Culture Research Institute for publishing and disseminating the fruit of my life's research and education.

Written by Thubten Phuntsok at his home at the Southwest University for Nationalities

Contents

Chapter I History of Tibetan Medicine	(1)
Origins of Tibetan Medicine	(1)
Translation of Foreign Medical Treatises	(2)
New Influences on the Tibetan Medical Tradition.....	(7)
The Schools of Jang and Zur.....	(7)
The Medical Profession in Ancient Tibet.....	(9)
Chapter II Four Elements and the Three Humors.....	(10)
The Four Elements.....	(10)
The Three Humors.....	(11)
Particular Terms in Tibetan Medicine.....	(14)
Chapter III The Symbolic Trees	(15)
First Tree: Physiology and Pathology.....	(15)
Second Tree: Diagnosis.....	(22)
Third Tree: The Methods of Treatment	(26)
Chapter IV Embryology.....	(36)
The Term “Monthly Sign” and the Regenerative Fluids.....	(36)
The Primary and Secondary Causes.....	(38)
Embryology.....	(40)
Chapter V Physiology.....	(50)
The Seven Bodily Constituents and their Functions.....	(50)
The Energies that Act on the Body.....	(51)
The Function of the Digestive Heat.....	(52)
The Three Pathogenic Humors.....	(55)
Chapter VI Blood Vessels and Nervous Channels.....	(60)
The Channels of Embryonic Formation	(60)
The Channels of Existence.....	(62)
The Connecting Channels.....	(64)
The Channels of the Lifespan.....	(75)

The Channels in the meditation practice.....	(82)
Chapter VII Wind and Vital Fluids.....	(91)
Wind.....	(91)
The Vital Fluids.....	(96)
Chapter VIII Metaphors and Measurements	(106)
Metaphors of the Human Body.....	(106)
The Vulnerable Points of the Body.....	(110)
The Measurements of the Human Body.....	(115)
Human Categories.....	(116)
Chapter IX Physical Decay.....	(120)
The Origin of the Signs that Indicate Physical Decay.....	(120)
Examining the Messenger from the Patient	(122)
Dreams Indicating Death.....	(123)
The Patient's Mood Condition.....	(131)
Presages of Impending Death.....	(132)
Signs of Extremely Imminent Death.....	(133)
Chapter X Pathology.....	(135)
Primary Causes of Disease.....	(135)
Secondary Causes of Disease.....	(136)
Inception and Locations of Humeral Disorders.....	(141)
Characteristics of Various Diseases.....	(142)
The Classification of the Diseases.....	(147)
Chapter XI Properties of Foods and Medicines.....	(154)
Source of the Properties of Foods and Medicines.....	(154)
Identification of the Six Tastes.....	(159)
Examples of the Six Tastes.....	(160)
Function of Tastes.....	(164)
Peculiar Function of Certain Tastes.....	(166)
Tastes in the Three Phases of Digestion.....	(167)
Chapter XII The Identifying of Plants.....	(173)
General the Identification of Plants.....	(173)
Intrinsic Properties.....	(175)
Potencies of Tastes.....	(177)
Examining the Characteristics of Tastes.....	(180)

The existing factors of inconsistent taste and function.....	(185)
Chapter XIII Dietetics and Nutrition.....	(190)
Characteristics and Properties of Foods and Drink.....	(190)
Unhealthy diet Toxic Foods.....	(207)
Moderation in Diet.....	(208)
Chapter XIV Behavioral Indications.....	(211)
Dally Behavior.....	(211)
Seasonal Behavior.....	(218)
Occasional Behavior.....	(225)
Chapter XV Therapeutic Principles.....	(228)
Introduction to Therapeutic Principles.....	(228)
Two General Methods of Cure.....	(238)
Chapter XVI Principles of Pharmacology.....	(242)
Collecting Medicinal Plants.....	(244)
Substitutive Ingredients in Each Other's.....	(251)
Properties of Ingredients Used Singularly.....	(253)
Best remedy.....	(257)
Minor Medicinal Compounds.....	(259)
Chapter XVII External Therapies.....	(266)
Blood-Letting.....	(266)
Moxibustion.....	(270)
Compress.....	(272)
Fomentation.....	(273)
Massage.....	(276)
Chapter XVIII The Practicing Physician.....	(277)
Qualifications of a Doctor	(277)
Defining the Doctor.....	(281)
Etymology of the Tibetan Term "Menpa"	(281)
Types of Doctors.....	(282)
The Doctor's Work.....	(285)
The Doctor's Accomplishments.....	(288)
Chapter XIX Diagnosis Pulse.....	(290)

Pulse preparation.....	(290)
The Right Time for Pulse Examination.....	(291)
The Place where Pulse is Examined.....	(291)
The Extent of the Pressure Applied to pulse.....	(293)
The Manner of the Examination.....	(293)
Three Constitutional Pulse Types of Ordinary Persons.....	(294)
Seasonal Pulses in Relation to the Five elements.....	(295)
Healthy pulse.....	(298)
Pulsations that Indicate Disease.....	(300)
Pulses Indicative of Death.....	(306)

Chapter 1 The History of Tibetan Medicine

1 Origins of Tibetan Medicine

The search for the means to maintain health is as ancient as the human civilization. There is a Tibetan saying which goes as follows: "the first ailment is indigestion, and boiled water is the first medicine. " There are many such expressions through which we can deduce the knowledge of ancient times. For example, the application of melted butter to cauterize a wound, or the drinking of boiled water to cure indigestion, tell us something of traditional household treatments. Such experiential knowledge, gathered and passed on for many generations, was gradually collected and became a written tradition.

Among the extant manuscripts, the oldest treatise of Tibetan medicine is a Bon text entitled (*Gso rig 'bum bzhi*). This treatise is a transcription of the teachings on medicine given by Shenrab Miwo, the master of the Bon, edited by his son Chebu Trishé, the first holder of the knowledge contained in the treatise. The sequence of the transmission of the Sorig bumzhi is described in the colophon as follows:

Concerning the sequence of the lineage of the Nine Scriptures, the Ambrosia of Medicine,^① the enlightened sovereign of the Doctrine transmitted it to Chebu Trishé. He taught it to Mutsa Trahé, who transmitted it to Sertog Chejam, who in turn transmitted it to Tongyu Thuchen, who explained it to Gyimtsha Machung, who transmitted it to seven Buddhist monks. When [The Ambrosia of Medicine] was adapted to a Buddhist format, the treatise was about to be thrown into the fire, but seven followers of the Bon religion rescued it and hid it in the secret cave of Jema Yungdrung, situated in the mountainous region of Western Tibet. Later, when the times were appropriate, Butso Sipé Gyelpo, a Bonpo priest of Western Tibet, rediscovered the treasure and explained its meaning to Phelchen, a sage of the Meu region. The venerable monk of Kham Yuka named

① It is another name for the Sorig bumzhi.

Drungmu Nyiwö—the lamp of the teaching—transmitted it to [others]. May all circumstances be conducive!

This information concerning the *bumzhi* ('bum bzhi) reveals the existence and origin of a truly ancient medical tradition. Shenrab Miwo lived 2,000 years B.C. In *The Light of Tise*,^① A History of Tibet and of Shang Shung, the renown scholar Namkhai Norbu states the following:

Shenrab Miwo, the Master of the Bon, was born in the year of the wood mouse, 1,917 years before Christ and lived till the age of eighty two. From that time until the Buddhist King Trisong Detsen founded the school of Tibetan medicine, for a period stretching over more than 2,600 years, Tibetan doctors practiced medicine on the basis of this treatise, the 'bum bzhi.

During the reign of the Tibetan King^② Nyatri Tsenpo, born in 417 BC., there were twelve lores known as "the Bon of the Twelve Lores." Among them, the lore known as "Therapeutic Methods, the Altruistic Lore of Healing," consists of medical knowledge. From that time until the advent of Trisong Detsen^③, every Tibetan king invited a master-doctor (*sku gshen*, *bla sman pa* in modern Tibetan) from the kingdom of Shang Shung (*Zhang zhung*).

An anecdote from the end of the sixth century gives an example of the sophistication of the medical knowledge of this period. It is said that Tagri Nyenzig^④, the 31st king of Tibet was blind from birth. He summoned a doctor from the region of Asha, who successfully operated on him and cured him of blindness.

2 Translation of Foreign Medical Treatises

In 629 AD, the 33rd king of Tibet, Songtsen Gampo became the sovereign of Tibet. He established political relations with several neighboring countries, and in the course of time he invited numerous doctors from India, China and

① Lores is an old religious word that has the same definition as "discipline."

② The Tibetan kings were originally called *spu rgyal*, literally meaning "king of spu." Nyatri Tsenpo came from the area of spu, a southeastern region of Tibet known as Kongpo. The kings who followed him were also called kings of spu as they belonged to the same line of descent.

③ It is said that during his childhood Trisong Detsen had a *sku gshen* or master doctor of the Bon religion, but later in his life, when he was converted to Buddhism, he took a Buddhist one.

④ The name of this king, Stag ri gnyan gzigs is explained as follows: when he was operated on and his eyes reopened, on the mountain known as Stag mo ri, near his palace, he saw (*gzigs*) an antelope called *gnyan*, in modern Tibetan *nyin*.

Persia to his kingdom. Several treatises from these countries were translated into Tibetan, thereby stimulating the composition of other texts.

[Kongtrül Lodrö Tayé] states in his Encyclopedia Indo-Tibetica the following:^①

At the time of Songtsen, the treatises of three major traditions [were translated into Tibetan], and during the period of Atsom (Ag tshom),^② those of the tradition that accompanied the Chinese princess and many others, written by Chinese monks and by Bi ji^③ were translated. The Somaradza^④ is the outcome of the exchange of knowledge among many experts.

As for Tibetan Medicine in the period of King Mes ag tshom, [Kongtrül Lodro Tayé] gives the following account in his Encyclopedia Indo-Tibetica:^⑤

During the time of King Me Atsom (Mes ag tshom) period, the famous Khrom doctor Be che tsen ba shi lha ha was invited to Tibet, admonished as King's personal physician, and he had written several medical compositions, such as Three Mothers and Fourteen Sons, Exclusive Secret Four Sons, and Be bum smug bo di ga yang gig as the Medium one, and Yi ge dmar chung as the Minor One. The Bi ji doctors were his descendants. The Famous doctors including Hwa shang, Khyung bo tze tze, Khyung bo do tsugs, Rgya prug gar mkan, Jog lha smon ba and others counseled on medical philosophy, then composed the first Tibetan medicine work named Somaradza (So ma R 'a dza/tsa). Put the compositions of earlier and later periods into the vessel covered with the glossy silk cloth that called Bla dbyad kyi gzhung 'tsho ba'i mdo.

① Kongtrül Lodrö Tayé was an important figure of nineteenth-century Tibet. Together with Jamyang Khyentsé, Chogling Rinpoché as well as other scholars and saints, he was the protagonist of an important work of preservation of the cultural and esoteric traditions of Tibet. The Encyclopedia Indo-Tibetica is among his five main works known as the "Five Treasures." This work consists of a synthesis of the history, philosophy and techniques of Indo-Tibetan Buddhism.

② Atsom (Ag tshom) was the father of the Tibetan king Trisong Detsen.

③ Bi ji was the name of a Persian doctor.

④ As Kongtrül mentioned in the Indo-Tibetan Encyclopedia, the Somarasza (So ma ra dza/tsa) was written by Chung bo tsi tsi, Chung bo dor tshug, Chog la min lam pa, etc.

⑤ Kongtrül Lodrö Tayé was an important figure of nineteenth century Tibet. With Jamyang Khyentsé, Chogling Rinpoché and other scholars and saints he was the protagonist of an important work of preservation of the cultural and esoteric traditions of Tibet. The Encyclopedia Indo-Tibetica is among his five main works known as the "Five Treasures." This work consists of a synthesis of the history, philosophy and techniques of Indo-Tibetan Buddhism.

At this time there also appeared military doctors. According to *The History of Medicine* by 'Be lo, Be che tsen ba shi lha ha's three disciples, i.e. 1. Zhang lha mo gzi, 2. Stong gzher mes bo, 3. Brang ti rgyal gnyer and others engaged in defending the Kham Region, and the King had rewarded them with the extensive, intermediate and abbreviated Mother and Son of Treatment for Wound with small profit letter from the combatant. It was said that The Treatment for the Head was rewarded to Stong gzher mes bo, The Treatment for limbs to Zhang lha mo gzi, and The Treatment for Front to Brang ti rgyal gnyer.

As for Tibetan Medicine in King Khri srung lde btsan's period, the great translator Be ro tsa na had changed the Bon medicine and astrology into the Buddhist form, and revealed like this as [Kongtrül Lodrö Tayé] states in his *Encyclopedia Indo-Tibetica*^①:

Be ro exaggerated med-astronomy into gter ma, and 'Tsho ro, Bi ji as well as Mta' zhi were descendant of King's personal physicians. The great translator Be ro had translated [texts of Tibetan medicine] with Bon and Buddhism mixed. As far as the contents of some gter ma are concerned, many Tibetan compositions were exaggerated into Be Ro's Indian translation works, which was vividly recognizable, and it was criticized by formal intelligent scholars. Similarly, the nine well-known Tibetan doctors emerged during the period of King Khri srung sde btsan were supposed to be mistaken, and it must have been during the "Later Propagation of the Doctrine." In addition to the fact that 'Tsho ro, Bi ji, and Mta'i hi were the king's personal physicians, they were non-mistaken descendants as well.

Here three unsettled questions are addressed as follows: First, the great translator Be ro had translated texts of Tibetan medicine with Bon and Buddhism mixed. As far as the contents of some gter ma are concerned, many Tibetan compositions were exaggerated into Be Ro's Indian translation works, which was vividly recognizable, and it was criticized by formal intelligent scholars. However, here we need to understand that the Bon texts were

① Kongtrül Lodrö Tayé was an important figure of nineteenth-century Tibet. With Jamyang Khyentsé, Chogling Rinpoché as well as other scholars and saints, he was the protagonist of an important work of preservation of the cultural and esoteric traditions of Tibet. The *Encyclopedia Indo-Tibetica* is among his five main works known as the 'Five Treasures.' This work consists of a synthesis of history, philosophy and techniques of Indo-Tibetan Buddhism.

exaggerated, instead of Indian texts, and we have to figure out who had criticized it. Actually, there were some works of astronomy and medicine whose contents were closely related to Bonworks, and they were unique and different from Indian and Chinese works. In the colophons it is stated passages translated from Indian and Chinese Languages are like "putting yak horns on the horse " (Tibetan proverb).

Second, according to Sde srid's gso rig chos 'byung (History of Medicine by Sde srid), which made an erroneous account of the nine famous physicians appeared during king Khri srung lde btsan's period, and 'Be Lo's work has criticized it in the following.

Third, the great translator Be ro had translated medical texts with Bon and Buddhism mixed, and transmitted the teachings to the King's personal physicians such as 'Tsho ro, Bi ji, and Mta' zhi. According to the three clarifications, we can learn that root texts of Tibetan medicine and astronomy were composed by the Bon scholars.

Bad ma bka' thang states that "Be ro tsa' na translated texts with medicine and astronomy mixed, [and] Be ro tsa' na translated texts with Bon and Buddhism mixed." This means he had changed the ancient Bon texts into the Buddhism form or structure, and it was clearly not necessary to translate works in Zhang Zhung language or Tibetan into Tibetan again. Therefore, it means Be ro had to change Bon texts into Buddhism form based on the particular social atmosphere of the time, and transmitted the teachings to the king's personal physicians 'Tsho ro, Bi ji, and Mta' zhi. The five physicians from five areas, which were mentioned in the foreword of Rta dbyad me lung as follows:

The king's horse was plagued by illnesses, [so the king] urged them to find great physicians for treating horses. For this reason, they invited gru gu ze to from Rgya, Ku lod yu khan from Zhang zhung, Gu yan khri gzigs from Hor Jog ro mang bo rje from Bod and Ta na chu skyes from A zha. [They] composed some works about horse illnesses.

In addition, Gru gu ze to from Rgya composed the text on moxibustion Gu yan khri gzigs from Hor wrote the text on drawing bad blood by piercing a bleeding nidi, Ku lod yu khan from Zhang Zhung and Jog ro mang bo rje from Bod composed medicine with spark and bleed, Ta na chu skyes from A

zha composed spark with all the parts. The five great physicians gathered together from five areas, but some careless people mistook the number to be nine. Thus, when they heard nine scholars from central Tibet, they just made up there were nine physicians during that time right away. Since the account about works composed by the nine great physicians is very vivid, it is probably exaggerated. .

During King Khri srung lde btsan's later years, the king had been stricken with illnesses, thus, he sent envoys to invite physicians, but no one came except Stong gsum gang ba of Rgya kong tze. The latter composed Gso ba dkar bo 'i sgron ma, and gave it to the king as gift. After this treatment, the king was fully recovered. As he was comparable to physicians from the four ends, the king rewarded him the places of Gyor stod, and got married. Then, there appeared the lineages of Mta' zhi.

In the wood-tiger year (774), the great physicians from India, China, Persia, and thousands of Tibetan doctors gathered together to discuss controversial issues.

In 841 A.D., King Glang dar ma was murdered, and Tibet fell into disunity. As result of various insurrections, ancient documents and evidence of culture were all lost. During this period, few people were able to pursue cultural studies; the medical tradition was adversely affected, and its development came to a halt.

During the second propagation of Buddhism (in 10th and 11th centuries), the translator Rin chen bzang po (958-1055) traveled to India to deepen his knowledge. On his return, he retranslated into Tibetan The Essence of the Eight Branches^① and other treatises that had already been translated by Yig rin chen of the Nye bo clan and others. Concerning these translations, Kongtrul states the following in his Encyclopedia Indo-Tibetica:

Before and later, during "second propagation [of Buddhism]," the translations were numerous. Rin chen bzang po propagated Yan lag rgyad pa [The Eight Branches], and transmitted them to the four doctors of Phu hreng; they passed the transmission to Shang shig, Dar gon, G • yu thog, and others. Then, knowledgeable Tibetan doctors began to spread teachings that reached far and wide.

^① The Essence of the Eight Branches, *yan lag brgyad pa'i snying po bsdus pa*, Astangahrdayasamhitānāma, authored by Vagbhata (pha gol), is an Indian treatise whose translation in Tibetan is contained in the bstan 'gyur (or commentaries to the Buddhist canon in Tibetan language). The Eight Branches refer to eight medical subjects: the physical ailments, the ailments of children and woman, the illnesses caused by provocations, wounds caused by arms, by poisons or intoxications, ailments of aging people and the preparation of elixirs of rejuvenation.

3 New Influences on the Tibetan Medical Tradition

In the 12th Century, Gyu thog yon tan mgon po (1171-1246) examined different transmissions of The Four Medical Treatises by comparing them with foreign medical texts. He went about revising and expanding The Four Medical Treatises extensively. He wrote several supplements to them, and initiated a renewed interest in Tibetan medicine.

Later, in the 13th Century, the Tantric adept Ugyenpa (U rgyan pa, 1230-1309) traveled to India, and stayed in the country of Oddiyana^①. There he studied various methods for the preparation of medical substances. According to him, in the country of Oddiyana he received numerous instructions from "woman of knowledge." Upon returning to Tibet, he continued his research on medicinal substances, studying their tastes, potencies and other properties. He developed a technique known as (a ngul chu btso bkru) to detoxify mercury. The detoxification of mercury is a complex chemical procedure that uses, among other things, the ashes of eight metals and eight minerals. Ugyenpa's discovery led to detoxified mercury being used as a crucial substrate for the addition of many precious gem recipes into the Tibetan pharmacopoeia.

New medicinal substances were again added to the Tibetan pharmacopoeia at the beginning of the 14th century, Rangjung Dörjé (rang byung rdo rje), the third Karmapa (1284-1339), undertook research on medicinal substances and identified about 830 substances, including herbs, minerals, and animal substances among them. He described their taste (including the post-digestive taste), their potencies and their various properties. He compiled the result of his research in a treatise called The Ocean of Names of Medicines.

4 The Schools of Jang and Zur

In the 15th Century, there emerged two schools of medicine, i.e. those of Jang and Zur. These two lineages still exist today. They take their name from two important doctors in the commentarial lineage and in the transmission of The Four Medical Treatises. There are no substantial differences between these two schools. Differences in the climatic conditions of the regions where these two doctors originated made the identification, classification and use of

^① Oddiyana, identified by certain scholars as the present day Swat Valley in Northern Pakistan, was one of the original centers of "tantric" Buddhism.

plants vary. Certain points of the body where moxibustion and bloodletting are performed also differ.

The school of Jang originated with Jangpa Namgyel Trakzang (Byang pa Rnam ryal Drag bzang) (1395-1475). He was born in a family of local administrators in Jangpa Depa (Byang pa sde pa), a village in the area of Ngamring (Ngam ring) in Western Tibet. The main recipient and disseminator of the teaching and of the lineage of the new treatises written by Jangpa Namgyel was Mi'i Nyima (Mi'i nyi ma), his son, followed by Lhatsun Trashī Pelzang (Lha btsun Bkra shis dpal bzang), Sonam Yeshe Gyaltzen (Bsod nams ye shes rgyal mtshan) and others.

The most important figure of this ancient school was Desi Sangyé Gyatso (Sde srid Sangs rgyas rgya mtsho, 1653-1705). In Lhasa, on Chagpori (Lcags po ri) hill, he built the school of medicine known as Dropen Rigje Ling ('Gro phan rig byed gling), where students were given free education, lodging and food. Sangyé Gyatso invited expert doctors from various regions of Tibet. With their collaboration and on the basis of *The Words of the Elder* (composed by Zurkawa Lodrö Gyelpo), he compiled *The Blue Beryl*, a new commentary on *The Four Medical Treatises*. Thanks to his work the teachings of the Jang school spread and flourished.

The school of Zur originated with Zurkar Nyamnyi Dörjé (Zur mkhar mnyam nyid rdo rje), also known as Awo Chöjé (1439-1475), who was born in Zurkar (Zur mkhar) in Southern Tibet. He wrote comments on different parts of the *Four Medical Treatises* and texts on various aspects of Tibetan medicine. Among the disseminators of the teaching of Zurkawa Nyamnyi Dörjé, we find "four students who gained proficiency," the "eight students who were made potent," "sixteen intelligent ones," "twenty famous ones" and so forth. Of particular relevance was the work of Zurkawa Lodrö Gyelpo (1509-1585), nephew of the founder of the school who authored *The Words of the Elder*, a commentary on the *Four Treatises* and other texts such as the *Refutation of the Arguments Vindicating that the Four Medical Treatises Belong to the Buddhist Canon*.

However, the figures who had contributed in major ways to the spread of this school were Deumar Tenzin Phüntsoḡ (De'u dmar *Bstan 'dzin phun tshogs*, 1672-?) and Situ Chökyi Jungné (Si tu Chos kyi 'byung gnas, 1700-1774). The latter founded a school called "Ngarig Lobling" (Lnga rig slob gling, The College for the Study of the Five Sciences) in 1754.^① The school produced a number of very

① The five sciences (rig pa i gnas lnga) are the traditional ancient sciences studied in Tibet. They include art, medicine, linguistics, logic and religion or inner knowledge.

influential doctors who facilitated the spread of the school itself. Due to their scholarship and dedication, there has been a continuous transmission of the school's teachings up to the present time.

Deumar Tenzin Phuntsog undertook detailed researches on various types of medicinal substances existent in Tibet, India, China, the region of Jang (adjacent to Dechen Tibetan autonomous prefecture, Yunnan Province) and other regions. The result of his research is contained in two treatises he wrote in 1727, entitled *The Sphere of Crystal* and *The Crystal Necklace*. In these texts, 2,294 medicinal substances are identified on the basis of their taste (including their post-digestive taste), potencies and properties. Still today, these texts form the basis of the pharmacopoeia used by Tibetan doctors from every region of Tibet.

5 The Medical Profession in Ancient Tibet

In ancient Tibet, the doctors were mainly monks. The laboratory where they prepared medicines and the clinic where they checked the patients were usually part of a monastic complex. In fact, the Tibetan monasteries were not only places of worship where spiritual traditions flourished, but also actual universities where several different disciplines were studied and medicine was practiced. In every part of Tibet there was a monastery, large or small, where sick people could go to seek treatment. The local people themselves collected the substances used for the preparation of medicines, i.e. nomads in the colder regions, or farmers and peasants in the lower valleys.

In ancient time, in Tibet it was a common custom for the doctor to dispense medicines regardless of the financial situation of the patient. If the patient was a rich man, the custom required that he offer, as a fee or reward, gold, silver, horses or other domestic animals; if the patient was from the middle class, he offered what he could afford. However, if the patient was very poor, the doctor would neither ask for nor accept any remuneration. It is said that it never happened that even the poorest sick person would die because he or she was unable to buy the medicines he or she needed.^①

^① This is a brief introduction to the history of Tibetan medicine. Those who wish to learn more about this subject should refer to my book entitled *Gso rig snying nor gces btus* (The Essentials of Tibetan Medicine).

Chapter II

Four Elements and Three Humors

1 The Four Elements

It is of fundamental importance that those who are starting to study Tibetan medicine have an understanding of terms such as “the four elements,” “the three humors,” “gdags and sribs, male, female and neuter in relation to components of the body and the quality of energy.

The four elements are the fundamental constituents of the universe, the tiny particles of which matter is composed. Everything that comes into existence and dies is composed of the four elements. The elements represent the primary cause in the formation of our universe and the beings who inhabit it.

The particles that make up matter are called “the conglomerate of the four elements” because each of the particles contains tiny particles and the associated property of the four elements. The potency (energy or force) is different according to whether the particles are those of the earth element (that have a hard nature); those of the water element (that have a humid and wet nature); the particles of the fire element (that have a hot nature) and the particles of the wind element (that have a cool and mobile nature).

The life and death of all phenomena of our universe is determined by the interaction of the potencies of the four particles. If there is balance (of energy) and harmony (of dynamics) there will be birth and growth of life. On the contrary, if the particles are unbalanced or in disharmony, the potencies of the four elements conflict with each other and serve as the main cause for the decline of life. Concerning this, The Exegetical Treatise states as follows:

Without earth there is no formation;
Without water there is no cohesion;
Without fire there is no maturation;
Without air there is no growth;
Without space there is no chance for development.

The phenomenal world and sentient beings are born from the four elementary particles and space. Therefore, a relation of essential constitutive identity links the elements that compose external and internal phenomena. The Conclusive Treatise states:

The bodies of creatures are formed by the four elements;
The ailments needing treatment are themselves caused
by the four elements,
The remedies of the medicines themselves are of the nature
of the four elements,
Thus, body, illness and the remedy are linked by an identical nature.

The sperm of the father and the egg of the mother from which the human body originates are fundamentally constituted by the four elements, thus, it is obvious that the human body that develops from them, possesses the same nature. Similarly, the nature of the ailments is the same as that of the body in which they manifest.

Various adverse conditions can cause an unbalance of the four elements of the body. The unbalance involved is determined by an increase, a decrease or a conflict between the elements, as a result of which different types of ailments develop. The remedy is based on the nature of the elemental imbalance, i.e. whether the remedy is of the same or opposite elemental nature. For example, if an illness is hot by nature, i.e. caused by an increase of the fire element, the elements must be re-balanced through treatment which is of a cold nature, i.e. of the water element. In this way, it is said that the body, the illness and the remedy are inextricably linked by an essential and identical nature (i.e., identical in their constitutive elements).

2 The Three Humors

The three humors are the biological expression of the potencies of the constitutive elements of the body. The terms "wind" (rlung), bile (mkhris pa) and phlegm (bad kan), by which the elements and their potency are indicated, refer to the substances that, in the human organism, are responsible for the physiological functions and for the pathological alterations. Kongtrül's manual, *The Medical Experience* states the following:

Because every being possesses the cause of the three emotions or poisons, the outcome of such cause, i.e., the ailments of the three humors, are potentially always present. In fact, from desire arise disturbances of wind; from aggression arise disturbances of bile; from delusion arise disturbances of phlegm. Moreover, the combination of two humors leads to the disturbances of two humors associated; the combination of three humors leads to the disturbances of three humors associated. The different degrees in the combination of the humors produce

different types of ailments. In brief, these disturbances are included in the category of 101 actual ailments originating in this life.^①

The three humors are the factors that determine the state of health of a person. The condition of psychophysical balance depends on the natural balance of the wind, bile and phlegm. The circumstances that induce an alteration of the three humors (increase, decrease and conflict) give rise to the ailment. This ailment manifests with the characteristics of the humor or humors whose balance has been disrupted.

Wind: Wind is the principle of circulation in our physical body, it's actually oxygen in our physical body.

The wind refers to a component of the organism whose nature is characterized by the mobility indispensable in the formation and life of the human body. Wind has ordinary and extraordinary functions. The ordinary functions of the wind include breathing, physical movements, exercise of effort, the maturation of the elements that constitute the organism, the capacity to clarify the sense perceptions, etc. The extraordinary functions of the wind that can be activated through special techniques include the arising of "inner heat" accompanied by a sensation of pleasure, the development of mystic experiences, knowledge and long life.

There are two types of wind : "wind of action " and "wind of primordial awareness." While the former performs different functions in the various parts of the body, the latter serves as the basis for the clarity of the sense perception and can be considered as the "basis " of consciousness.^② Wind is classified according to five different functions in the following way:

1. Life-sustaining wind
2. Ascending wind
3. Pervasive wind
4. Fire-accompanying wind
5. Descending purgative wind

The functions of these five winds will be explained in the following chapters.

^① These ailments are fatal when they are not treated, see ch.12.

^② The wind of pristine awareness represents the potency that, working with the life sustaining wind, serves as the basis for the experience of the sensations associated with the senses and mental consciousness. In the esoteric schools this wind is explained as the wind that is inseparable from the primordial condition of the mind. The wind of action or of the function is associated with the disturbing thoughts and emotions. Trans

Bile: Bile is principal of metabolism in our physical body. In face, the normal temperature in our physical body.

Commonly, the term bile is used to denote the gall bladder and its contents, but, in the context of the three humors of Tibetan medicine, its meaning is radically different. Bile here indicates the heat present in all parts of the body. Heat is possibly the most important element of the human organism, in that it constitutes the basis of the vital energy and it is the principal cause of the strength and radiance of the person. In old age, when the heat of the organism diminishes, the radiance and the strength of the person also gradually vanishes.

The main area of the activity of warmth is in the digestive system; in addition, each of the seven bodily constituents^① depends upon heat for their proper formation. In particular, the digestive warmth is responsible for the regeneration of the body: it separates the pure part of the blood from the residue, thereby becoming an element that assures the survival and the inner and outer radiance of an individual. Bile is classified according to its different functions in the following way:

1. Digestive bile
2. Color-producing bile
3. Energizing bile
4. Vision-producing bile
5. Complexion-clearing bile

Phlegm: Phlegm is the principal of the humidity in our physical body. It's actually water in our physical body.

The term phlegm in Tibetan medicine denotes all the components of the organism that have a humid and wet nature. Phlegm is classified according to its functions in the following way:

1. Supporting phlegm
2. Decomposing phlegm
3. Gustatory phlegm
4. Satisfying phlegm
5. Connective phlegm

The functions and the potencies of phlegm will be explained in the chapter on the physiological characteristics.

^① For the seven constituents, see part.6.1.

3 Particular Terms in Tibetan Medicine

In the ancient texts of Tibetan medicine and astrology, as well as in the Bon rites (gto, mdos, yas and glud.), to indicate the different qualities of the energy of the substances, reference is made to male, female and neuter properties. The male quality is characterized by a positive energy, and the female quality by negative energy. The neuter quality indicates a property of energy that is neither positive nor negative.

The environmental conditions or the medicines that possess an exclusively male energy are known as gdags, while those that, because of their components as a whole, manifest an exclusively female energy are called sribs. The terms gdags and sribs have different meanings in different contexts. Gdags may signify day, male, heat, a sunlit place, or light. Sribs may signify night, female, cold, a shady place, or darkness.

Chapter III The Symbolic Trees of the Fundamental Treatise

The core of all Tibetan medical knowledge is gathered into The Four Treatises on Medicine where, using the metaphor of "the trees that transcend sorrow," the physiological condition and the different aspects and remedies of the human pathology are described. The essence of the metaphor is expressed in the following verse of the Fundamental Treatise:

The three trees have nine trunks,
From the trunks 47 branches spread,
On which 224 leaves,
Two flowers and tree fruits grow.

Now, in the following paragraphs, the general concepts of physiology, pathology, and the diagnostic and therapeutic methods will be explained, utilizing the metaphor of trees with their trunks, branches and leaves laid out in this Treatise.

1 First Tree: Physiology and Pathology

The first tree represents the functioning of the body, which is the object of medical science. The tree has 2 trunks:

1) The trunk of the body whose functioning is not altered, that resembles crystal clear water, the condition in which the humors, the bodily constituents^① and the impurities do not go beyond their natural level.

2) The trunk of the body whose functioning is altered, that resembles freezing water, the condition in which the alteration of the humors, of the bodily constituents and of the impurities can lead to the death of the organism.

These trunks symbolize two different conditions of the body: health and illness.

^① Cfr. ch.VI



Trunk One: The Healthy Body

Three branches grow on the first trunk. The first branch, called "the humoral basis of illness." It symbolizes the three humors, i.e., wind, bile and phlegm; the second branch symbolizes the seven bodily constituents and the third branch symbolizes the three impurities.

Branch 1: The Three Humors

The branch of the three humors that guarantee the survival of the living organisms has 15 leaves symbolizing the 5 aspects (or functions) of wind, the 5 aspects of bile and the 5 aspects of phlegm.

The first 5 leaves represent the humor of wind in its different functions and locations:

Leaf 1. The life-sustaining wind that is situated in the brain

Leaf 2. The ascending wind that is situated in the chest

Leaf 3. The pervasive wind that is situated in the heart region

Leaf 4. The fire-accompanying wind that is situated in the digestive tract

Leaf 5. The descending purgative wind that is situated in the anal region

Five leaves represent the humor of bile in its different functions and locations:

Leaf 6. The digestive bile that is situated in the intestine

Leaf 7. Color-producing bile that is situated in the liver

Leaf 8. The energizing bile that is situated in the heart region

Leaf 9. The vision-producing bile that is situated in the eyes^①

Leaf 10. Complexion-clearing bile that is situated in the skin

Five leaves represent the phlegm in its different functions and locations:

Leaf 11. The supporting phlegm that is situated in the chest

Leaf 12. The decomposing phlegm that is situated in the stomach

Leaf 13. The gustatory phlegm situated in the tongue

Leaf 14. The satisfying phlegm that is situated in the head

Leaf 15. The connective phlegm that is situated in the joints

Branch 2. Bodily Constituents

This branch has 7 leaves, each representing one of the seven bodily constituents (responsible for the structure and the development of the body) and its origin:

Leaf 16. The chyle or nutritional essence that originates in foods and drinks

Leaf 17. The blood that originates in the nutriments

Leaf 18. The muscle tissue that originates in the essence of blood

Leaf 19. The adipose (and glandular) tissue that originates in the essence of muscles

Leaf 20. The bone tissue that originates in the essence of adipose tissue

Leaf 21. The marrow tissue that originates in the essence of bones

Leaf 22. The reproductive fluids that originates in the essence of marrow

^① Cfr. ch.VI

Branch 3. The Impurities

This branch has 3 leaves, each representing one of the impurities:

Leaf 23. Feces

Leaf 24. Urine

Leaf 25. Perspiration

Trunk Two: The Unhealthy Body

From the second trunk, which symbolizes illness, grow 9 branches. Branches 4 and 5 represent the primary and secondary causes that contribute to the arising of illnesses; branches 6-12 represent the ways through which the illnesses manifest.

Branch 4. Primary Causes of Illness

This branch includes 3 leaves that represent the 3 primary causes and the humor that is altered as a result of each cause:

Leaf 26. Desire that is the primary cause of wind disturbances

Leaf 27. Aggression that is the primary cause of bile disturbances

Leaf 28. Delusion that is the primary cause of phlegm disturbances

Branch 5. Secondary Causes

This branch includes 4 leaves, each representing one of the causes directly responsible for the alteration of the physiological balance of the humors:

Leaf 29. Atmospheric time

Leaf 30. "Provocations" or sudden causes

Leaf 31. Diet

Leaf 32. Conduct or regimen

Branch 6. Sites of Inception for Diseases

This branch includes 6 leaves, each representing an area of the body of inception and the manner in which the disease spreads:

Leaf 33. Diffusion through the skin

Leaf 34. Extension through the muscles

Leaf 35. Circulation through the vessels and channels

Leaf 36. Lodgment in the bones

Leaf 37. Descent into the solid organs

Leaf 38. Flowing down into the hollow organs

Branch 7. The Location of the Humors

This branch includes 3 leaves each representing the location of a humor:

Leaf 39. Phlegm location is in the upper part of the body, in particular in the brain

Leaf 40. Bile location is the middle part of the body, in particular in the liver and the gall bladder

Leaf 41. Wind location is in the lower part of the body, in particular in the pelvic region

Branch 8. Pathways Affected by Pathogenic Humors

This branch has 15 leaves that symbolize the organs and bodily constituents affected by the three pathogenic humors.

Five leaves represent the parts of the body where wind diseases manifest:

Leaf 42. The bones, the bodily constituent in which wind moves

Leaf 43. The ears, among the sense organs

Leaf 44. The bodily hairs or the skin

Leaf 45. (The blood vessels of) the heart, among the solid organs

Leaf 46. The large intestine, among the hollow organs

Five leaves represent the parts of the body where bile diseases manifest:

Leaf 47. The blood, the bodily constituent where the bile moves

Leaf 48. The perspiration, among the impurities

Leaf 49. The eyes, among the sense organs

Leaf 50. The liver, among the solid organs

Leaf 51. The gall bladder, among the hollow organs

Five leaves represent the parts of the body where phlegm diseases manifest:

Leaf 52. The chyle or nutritional essence, the muscles, the adipose tissue, the marrow, the reproductive fluids, the bodily constituents where phlegm moves

Leaf 53. The feces and urine, among the impurities

Leaf 54. The tongue, among the sense organs

Leaf 55. The lungs, the spleen and kidneys, among the solid organs

Leaf 56. The stomach and the bladder, among the hollow organs

Branch 9. The Contexts in which Illness Arises

This branch represents the relation between age, environment, and humoral imbalance. The branch has nine leaves.

Three leaves represent the different ages of life and the humoral disturbances associated with them:

Leaf 57. Old age, associated with wind disturbances

Leaf 58. Adulthood, associated with bile disturbances

Leaf 59. Childhood, associated with phlegm disturbances

Three leaves represent the environmental conditions in which the three humoral disturbances can arise.

Leaf 60. Windy and cold places that predisposes to wind disturbances

Leaf 61. Dry and hot places that predispose to bile disturbances

Leaf 62. Damp and unctuous places that predispose to phlegm disturbances

Three leaves represent the seasons and the hours of the day that aggravate humoral disturbances:

Leaf 63. The disturbances of wind aggravate during summer, in the afternoon and at dawn

Leaf 64. The disturbances of bile aggravate during autumn, at noon and midnight

Leaf 65. The disturbances of phlegm aggravate during spring, in the evening and morning

Branch 10. Fatal Outcome

This branch has nine leaves that symbolize the conditions through which the illness became fatal. Each leaf represents one of the nine conditions that make the disease incurable.

Leaf 66. Exhaustion of the three factors that sustain life, namely lifespan itself, merit and past actions

Leaf 67. Fatal combination of hot and cold diseases: when one is cured the other is aggravated and does not respond to treatment,

Leaf 68. Treatment of diseases of a hot or cold nature with remedies whose nature is identical with that of the disease

Leaf 69. Injury of the vulnerable points of the body by diseases or arms,

Leaf 70. Delay in the treatment of an illness associated with wind, which interrupts the ascending wind which is the support of the life-sustaining wind

Leaf 71. Delay in the treatment of fevers

Leaf 72. Delay in the treatment of serious illnesses of cold nature (that become deeply seated in the body)

Leaf 73. Exhaustion of the bodily constituents that are unresponsive to treatment

Leaf 74. Extreme injury consisting in the loss of the Lha^① caused by elemental spirits or other "provocations"

Branch 11. Illnesses Originated by Therapies

This branch represents the disturbances of wind, bile and phlegm that can arise following the treatment of a specific humor. The branch has twelve leaves. The first six leaves symbolize, for each humor, a disorder that may follow a successful therapy:

Leaf 75. Bile disorder arising after the successful treatment of a wind disease

Leaf 76. Phlegm disorder arising after the successful treatment of a wind disease

Leaf 77. Wind disorder arising after the successful treatment of a bile disease

Leaf 78. Phlegm disorder arising after the successful treatment of a bile disease

Leaf 79. Wind disorder arising after the successful treatment of a phlegm disease

Leaf 80. Bile disorder arising after the successful treatment of a phlegm disease

The six following leaves symbolizes, for each humor, a disturbance that may follow an unsuccessful treatment:

^① La (bla) An exclusively Tibetan conception of the subtle form of the energy of the four elements of the body that serves as a support for the life. In a popular conception, the La has the aspect of the person that possesses it and can be injured beyond recovery, lost or stolen as a result of various circumstances such as the provocation of non-humans.

Leaf 81. Bile disorder arising after the unsuccessful treatment of a wind disease

Leaf 82. Phlegm disorder arising after the unsuccessful treatment of a wind disease

Leaf 83. Wind disorder arising after the unsuccessful treatment of a bile disease

Leaf 84. Phlegm disorder arising after the unsuccessful treatment of a bile disease

Leaf 85. Wind disorder arising after the unsuccessful treatment of a phlegm disease

Leaf 86. Bile disorder arising after the unsuccessful treatment of a phlegm disease

Branch 12. Summary

This branch has two leaves that summarize the nature of the illnesses in relation to the elemental constituents and the humors:

Leaf 87. Illnesses associated with wind and phlegm have the cold nature of the water element

Leaf 88. Illnesses associated with the blood and heat have the hot nature of the fire element

2 Second tree. The Methods of Investigation for the Diagnosis

The root of the diagnosis symbolizes the cause-effect relationship between the illness and its symptoms, for example, the relationship between fire and smoke. Out of this root grow three trunks, i.e. 3, 4, and 5: 3 visual observation, 4 palpation of the pulse and 5 verbal inquiry.

Trunk Three: Visual Observation

This trunk sprouts 2 branches, the thirteenth branch, visual observation of the tongue, and the branch fourteenth visual observation of the urine.



Branch 13. Observation of the Tongue

The branch has three leaves that symbolize the characteristics of the tongue that indicate an imbalance of the three humors:

Leaf 89. In a wind imbalance, the tongue is reddish, dry and coarse

Leaf 90. In a bile imbalance, the tongue has a dense film of light yellow mucus

Leaf 91. In a phlegm imbalance, the tongue is whitish, pale, smooth and moist

Branch 14. Observation of the Urine

This branch concerning urinal analysis has three leaves that symbolize the characteristics of the urine that indicate the imbalance of the three humors:

Leaf 92. The urine under the imbalance of wind is slightly bluish in color and produces large bubbles when stirred.

Leaf 93. The urine under the imbalance of bile has an orange color and a fetid odor.

Leaf 94. The urine under the imbalance of phlegm is transparent like water, with slight odor and vapor.

Trunk Four: Palpation of the Pulse

The trunk represents the palpation of the pulse that, serving as a messenger, reveals to the doctor the condition of the organism. This trunk has three branches (each with a single leaf) that symbolize the characteristics of the pulse that indicate the unbalance of wind, bile and phlegm:

Branch 15. The Pulse Indicative of Wind Imbalance

Leaf 95. The pulse indicative of imbalance of wind is "Floating."
When you press on an empty pulse, it sometimes is incapable of beating.

Branch 16. The Pulse Indicative of Bile Imbalance

Leaf 96. The pulse indicative of the imbalance of bile is rapid, strong, and tight.

Branch 17. The Pulse Indicative of Phlegm Imbalance

Leaf 97. The pulse indicative of imbalance of the phlegm is sinking, minute and slow.

Trunk Five: Verbal Enquiry

The trunk concerning inquiry indicates the procedure of questioning the patient for identifying the secondary causes and the circumstances (of place

and time) that have caused the disease. From this trunk sprout branches 18, 19 and 20, concerned respectively with: the secondary or activating causes for illness, the symptoms, and the habits (diet and behavior) that alleviate the disease.

Branch 18. Inquiry Concerning the Activating Causes

The branch has three leaves, each representing the questions the doctor should ask the patient concerning his or her habits related to the diseases of wind, bile and phlegm:

Leaf 98. Diet and conduct with light and coarse properties that activate wind disorders

Leaf 99. Diet and conduct with sharp and hot properties that activate bile disorder

Leaf 100. Diet and conduct with heavy and unctuous properties that activate phlegm disorders

Branch 19. Inquiry Concerning the Symptoms

The branch has 23 leaves; the first nine indicate the symptoms of wind diseases:

Leaf 101. Yawning and trembling

Leaf 102. Stretching the limbs

Leaf 103. Cold Shivering due to coldness

Leaf 104. Aching hips, waist, and joints

Leaf 105. Acute pains shifting from one part of the body to the other

Leaf 106. Nausea and unproductive retching

Leaf 107. Diminishing of the perceptive power of the senses

Leaf 108. Restlessness

Leaf 109. Emptiness of the stomach that aggravates the above symptoms

Five leaves indicate the symptoms of bile diseases:

Leaf 110. Bitter taste in the mouth

Leaf 111. Headaches

Leaf 112. Hyperthermia

Leaf 113. Acute pains in the upper part of the body

Leaf 114. Periods after digestion when such symptoms are aggravated

Nine leaves indicate the symptoms of phlegm diseases:

Leaf 115. Loss of appetite

Leaf 116. Difficult digestion

Leaf 117. Vomiting

Leaf 118. Sticky mouth

Leaf 119. Sensation of fullness of the stomach

Leaf 120. Eructation

Leaf 121. Lethargy of body and mind

Leaf 122. External and internal sensations of cold

Leaf 123. Periods after meals when such symptoms are aggravated

Branch 20. Behaviors that Alleviate the Disease

The branch has three leaves, each representing the properties of the habits of life (diet and conduct) that ameliorate the diseases caused by the three humors:

Leaf 124. Diet and conduct with oily and nutritious properties that ameliorate wind diseases

Leaf 125. Diet and conduct with cooling properties that ameliorate bile diseases,

Leaf 126. Diet and conduct with hot properties that ameliorate phlegm diseases^①

3 Third Tree: The Methods of Treatment

After the diagnosis follows the therapeutic treatment, comparable to the sun that melts the ice of the disease. From this root originate four trunks that represent therapy.

^① The description of the trees given in the preceding paragraphs accords with the paintings kept at the Pelpung (Dpal spungs, Sde dge) which are based on the Explanation of the Trees of the Fundamental Treatise by Deumar Tenzin Phuntso, while the paintings that are kept at the Mentsikhang (Sman rtsis khang, Hospital of Traditional Medicine) in (Lhasa are based on the description found in the treatise The Blue Beryl. They mainly differ in the representations related to the branch 18, 19, e 20 of the fifth trunk.) In the paintings of the Mentsikhang, on each of the three branches (called branch of wind, bile and phlegm) that symbolize inquiry, activating causes, symptoms and beneficial habits are depicted together (see Tibetan Medical Paintings, text p.177-8, Harry N. Abrams, Inc. Publisher, New York 1992).



Trunk Six: The Curative Diet

From the trunk sprout six branches that represent the foods and drinks suitable for imbalances of wind (branches 21-22), of bile (branches 23-24) and of phlegm (branches 25-26).

Branch 21. The Foods Recommended for Wind Imbalance

The branch has nine leaves:

- Leaf 127. Year-old dried horse's flesh
- Leaf 128. Year old dried donkey flesh
- Leaf 129. Year-old dried marmot flesh

- Leaf 130. Great meat^①
- Leaf 131. Grain-seed oils
- Leaf 132. Year-old butter
- Leaf 133. Molasses of sugar cane
- Leaf 134. Garlic
- Leaf 135. Onion^②

Branch 22. Drinks Recommended for Wind Imbalance

The branch has five leaves:

- Leaf 136. Milk
- Leaf 137. Ale prepared from partially ground angelica (picture 395)
- Leaf 138. Ale prepared from partially ground Solomon's seal (picture 284, 621)
- Leaf 139. Ale prepared from molasses of sugar cane
- Leaf 140. Ale prepared from bones [of Yak or Dri]^③

Branch 23. Foods Recommended for Bile Imbalance

The branch has seven leaves:

- Leaf 141. Fresh butter of cow or goat milk
- Leaf 142. Game including the flesh of all wild angulates^④
- Leaf 143. Goat meat
- Leaf 144. Meat of skam i.e., Tole^⑤
- Leaf 145. Clear soup of newly stored barley

① Great meat (sha chen) means dog meat, horse flesh, cow meat and human placenta.

② The Blue Beryl and other treatises of Tibetan medicine classify year-old meat as a separate leaf and enumerate ten leaves on branch 21. However, this classification is incorrect since 1) specific types of year-old meat have been enumerated (horse, donkey and marmot) and 2) the medical experience (recorded in the Words of the Elder and that recorded in the texts of the doctor Deumar) confirm that year-old donkey and horse flesh have special properties in curing wind ailments.

③ The Yak (g yag) is a domestic or wild animal resembling the bison. The Dri (bri) is its female counterpart. The Blue Beryl and other treatises consider the ale prepared from angelica and that prepared from Solomon's seal as a single ale and thus enumerate only four leaves on branch 22. Deumar and others add to this classification another leaf that of ale prepared from roasted barley flour. It is likely that both classifications are baseless. Here, in accordance with the Exegetical Treatise we have distinguished the ale of angelica from that of Solomon's seal and excluded the ale of barley.

④ Wild angulates (nis she) or game that lack the central upper tooth (ya so).

⑤ The Tibetan animal called tole (to le) is of two species, the bato (ba to) and the drito (bri to). The bato is a cross between the dzomo and an ox, the drito is a cross between the dzomo and the yak. The dzomo is in turn a breed between an ox and a dri or female yak.

Leaf 146. Unseasoned soup made from turnip greens^①.

Leaf 147. Soup of dandelion

Branch 24. Drinks Recommended for Bile Imbalance

The branch has five leaves:

Leaf 148. Yoghurt, made from cow and goat milk

Leaf 149. Buttermilk derived from cow and goat's milk^②

Leaf 150. Clear unseasoned soup of cereals

Leaf 151. Cool water from glaciers and mountain rocks

Leaf 152. Boiled water taken cold

Branch 25. Foods Recommended for Phlegm Imbalance

The branch has six leaves:

Leaf 153. Mutton

Leaf 154. Wild yak meat

Leaf 155. Flesh of beast of prey

Leaf 156. Fish

Leaf 157. Honey

Leaf 158. Old barley grain grown in arid regions

Branch 26. Drinks Recommended for Phlegm Imbalance

The branch has three leaves:

Leaf 159. Curd and buttermilk of the Dri

Leaf 160. Strong ale prepared from barley

Leaf 161. Warm boiled water

Trunk Seven: Behaviors

This trunk sprouts three branches that represent behavioral routines recommended for imbalances of wind, bile and phlegm.

^① In the different commentaries to the Fundamental Tantra skyab (identified here as turnips) is identified as the white dandelion gur skya, however, such identifications should be examined further.

^② Buttermilk (dar ba) here is the liquid with an acid taste left over from the extraction of butter stored for several days.

Branch 27. Conduct Recommended for Wind Imbalance

The branch has two leaves:

Leaf 162. Dwelling in warm places

Leaf 163. Company of pleasant friends

Branch 28. Conduct Recommended for Bile Imbalance

The branch has two leaves:

Leaf 164. Dwelling in cool places

Leaf 165. Relaxation

Branch 29. Conduct Recommended for Phlegm Imbalance

The branch has two leaves:

Leaf 166. Dwelling in warm places

Leaf 167. Energetic activities

Trunk Eight: Medications

This trunk has 15 branches that represent the tastes, the potencies, the pacifying and cathartic effects of the medications classified according to the imbalance of each of the three humors.

Branch 30. Tastes of Medications for Wind Imbalance

The trunk has three leaves:

Leaf 168. The sweet taste

Leaf 169. The sour taste

Leaf 170. The salty taste

Branch 31. The Potencies of Medications for Wind Imbalance

The branch has three leaves:

Leaf 171. The oily potency

Leaf 172. The heavy potency

Leaf 173. The smooth potency

Branch 32. The Tastes of Medicines for Bile Imbalance

The branch has three leaves:

Leaf 174. The sweet taste

Leaf 175. The bitter taste

Leaf 176. The astringent taste

Branch 33. The Potencies of Medicines for Bile Imbalance

The branch has three leaves:

Leaf 177. The cool potency

Leaf 178. The subtle potency

Leaf 179. The blunt potency

Branch 34. The Tastes of the Medications for Phlegm Imbalance

The branch has three leaves:

Leaf 180. The pungent taste

Leaf 181. The sour taste

Leaf 182. The astringent taste

Branch 35. The Potencies of Medications for Phlegm Imbalance

The branch has three leaves:

Leaf 183. The sharp potency

Leaf 184. The coarse potency

Leaf 185. The light potency

The following six branches represent pacifying medications prepared combining tastes and potencies. They include broths, medicinal butters, decoctions, powders, pills and ashes.

Branch 36. Broths that Pacify Wind Imbalance

The branch has three leaves:

Leaf 186. Broth of ankle and other bones

Leaf 187. Broth of the "four essences," i.e., of aged meat, butter, molasses and ale

Leaf 188. Broth of dried sheep head cooked for a long time

Branch 37. Medicinal Butters that Pacify Wind Imbalance

The branch has five leaves:

Leaf 189. The medicinal butter based on nutmeg

Leaf 190. The medicinal butter based on garlic

Leaf 191. The medicinal butter based on the "three [myrobalan] fruits"^①

Leaf 192. The medicinal butter based on the five roots^②

Leaf 193. The medicinal butter based on the "great medication,"
i.e., black aconite

Branch 38. Decoctions that Pacify Bile Imbalance

The branch has four leaves:

Leaf 194. The decoction based on elecampane

Leaf 195. The decoction based on moonseed

Leaf 196. The decoction based on gentian

Leaf 197. The decoction based on the "three [myrobalan] fruits "

Branch 39. The Powders that Pacify Bile Imbalance

The branch has four leaves:

Leaf 198. Powder based on camphor

Leaf 199. Powder based on [white or red] sandalwood

Leaf 200. Powder based on saffron^③

Leaf 201. Powder based on bamboo pith

Branch 40. The Pills that Pacify Phlegm Imbalance

The branch has two leaves:

Leaf 202. Pills based on black aconite

Leaf 203. Pills based on different types of salt

① The three fruits ('bras bu gsum): chebulic (a ru ra, terminalia chebula), belleric (ba ru ra, terminalia bellerica), and embellic (skyu ru ra, phyllanthus emblica).

② The five roots (rtsa ba lnga: Solomon's seal (ra mnye), asparagus (nye shing), angelica or hogfennel (lca ba), mirabilis himalaica (ba spru), and caltrops (gze ma).

③ Saffron refers in particular to the saffron from Kashmir known as ka che gur gum.

Branch 41. The Medicinal Ashes ① that Pacify Phlegm Imbalance

The branch has five leaves:

Leaf 204. Medicinal ashes based on burnt pomegranate

Leaf 205. Medicinal ashes based on burnt rhododendron

Leaf 206. Medicinal ashes based on vulture droppings②

Leaf 207. Medicinal ashes based on Sallucidum and different types of burnt salt

Leaf 208. Medicinal ashes based on burnt calcite

The three following branches represent the cleansing treatments indicated for imbalances of the three humors. They include enemata, purgatives and the emetics.

Branch 42. Enemata for Wind Imbalance

The branch has three leaves:

Leaf 209. Enema based on milk of Dri and decoction of flesh of sheep, indicated for disorders caused by wind alone

Leaf 210. Enema based on cow's milk and decoction of flesh of water animals, indicated for disorders caused by wind and bile

Leaf 211. Enema based on milk of goat and decoction of flesh of animals that live in dry areas, indicated for disorders caused by wind and phlegm③

Branch 43. The Purgatives for Bile Imbalance

The branch has four leaves:

Leaf 212. General purgatives indicated in all kinds of bile disorders

① Medicinal powder of burnt substances are known as Tres sam in Tibetan. The term is of doubtful origin. According to the scholar Namkai Nörbu it is an ancient term of the language of the Shangshung kingdom.

② The oral instructions of the Zur medical tradition identifies the term Rgo ma kha with the corpse-eating vulture's droppings. In eastern Tibet, instead of vulture droppings, doctors prefer to use the droppings of go bo (*Gypaetus barbatus hemachalanus*, a bird with white head and yellow feathers which lives in Tibet at an altitude between 2500 and 4500 m.). This bird has a very strong digestive power (that is stronger than that of all other animals) and eats mainly bones. Its droppings resemble chalk; once dried they are used by children as chalk to write on black boards.

③ These types of enema in The Words of the Elder are differentiated on the basis of the humoral imbalance, simple or combined. Some Tibetan doctors erroneously differentiate them according to the procedure for administering them.

Leaf 213. Specific purgatives indicated in bile diseases affecting particular organs

Leaf 214. Strong purgatives indicated in severe bile disorders

Leaf 215. Mild purgatives indicated for old people and for emaciated individual

Branch 44. The Emetics, for Phlegm Imbalances

The branch has two leaves:

Leaf 216. Strong emetics

Leaf 217. Mild emetics

Trunk Nine: External Therapy

This trunk, concerning external therapy has three branches, which correspond to treatments indicating for disorders of the three humors.

Branch 45. The External Therapy Recommended for Wind Imbalance

The branch has two leaves:

Leaf 218. Massage with oils applied on specific wind points of the body

Leaf 219. Hor-moxibustion^① applied on the points of the wind

Branch 46. The External Therapy Recommended for Bile Imbalance

The branch has three leaves:

Leaf 220. Induced perspiration,

Leaf 221. Bloodletting

Leaf 222. Hydrotherapy

Branch 47. The External Therapy Recommended for Phlegm Imbalance

The branch has two leaves:

^① Certain contemporary Tibetan doctors consider " hor-moxibustion " as a form of Mongolian moxibustion. This is a baseless belief. The " hor-moxibustion " is in fact a therapy whose name is linked to the Tibetan kingdom of Horo (hos ro) and it is mentioned in the 'bum bzhi, the Bon treatise of medicine. The Tibetan kingdom of Horo was one of the twelve minor kingdoms into which Tibetan territory was divided in the year 2000 BC. We find confirmation of the existence of this kingdom in the Bon text called legs bshad rin po che'i mdzod when it records the marriage of Shenrab Miwo, the teacher of the Bon, with Osa Gyalme (hos bza' rgyal med ma), the daughter of the king of Horo.

Leaf 223. Compresses

Leaf 224. Moxibustion

The Two Flowers and the Three Fruits

The two flowers that blossom on the first tree symbolize health and long life. The health flower has one fruit, which symbolizes happiness. The long life flower has two fruits, which symbolize worldly and spiritual goals and wealth.

Chapter IV

Embryology and the Phases of Fetal Development

The human body is pervaded by consciousness of an individual. In its unmodified physiology, the body remains free of illnesses; this condition of balance needs to be preserved. In its modified state, the human body is ill and needs to be brought back to a balanced state. To practice Tibetan medicine, comprehension of these two states as described in *The Four Treatises of Medicine* is crucial. To distinguish what pacifies and what aggravates illnesses, one also needs a deep understanding of diet, behavior, medications and external therapy as explained in *The Exegetical Treatise*. The Words of the Elder states as follows:

One who has not studied *The Exegetical Treatise* does not know physiology; one who ignores physiology does not know the nature of disease; one who ignores the nature of the illness will not know the characteristics of diet, of conduct, of medication, and of external therapy. Without a knowledge of these, one does not know medicine even partially. Not knowing these, like a blind man groping in the dark, how can one apply the art of healing?

1 The Term "Monthly Sign" and the Regenerative Fluids

There is some confusion about the primary causes of conception that stems from misunderstanding two key terms used in Tibetan medicine: "blood" and "monthly sign." These terms occur, for example in the following passages of *The Exegetical Treatise* as follows:

[The factors that serve as the foundation for conception are] "the sperm of the father and the blood of the mother are devoid of imperfections." And [in the woman,] the "monthly sign" indicates her desire for a man.

Both terms, "blood" and "monthly sign," have been often and erroneously referred to as the menstrual blood, which is the residue accumulated in the womb and expelled every month from the uterus. Menstrual blood has no generative power. "Monthly sign" is a term peculiar to Tibetan medicine, and refers to the monthly descent of the ovum in the uterus. The ovum moves through the ovarian ducts from the ovaries (where it is produced as an end

product of the cycle of the nutritional essence) to the uterus in a determined period each month. If the circumstances for its fertilization are not present, it is transformed into menstrual blood. Menstrual blood is also a "monthly sign," but, to avoid misunderstandings, it is more properly defined simply as "menstrual blood." In common Tibetan language, one refers to the menses with terms such as "lumbar pain," "backache," and not with the term "monthly sign." With the exception of doctors and educated persons, most Tibetans neither use nor know the meaning of the term "monthly sign." The part of the reproductive fluid that gives rise to the semen is also a topic of discussion and misunderstandings. Concerning this point, the Exegetical Treatise says the following:

The reproductive fluid, the last of the physical constituents,
has two aspects, a pure and an impure one. The pure aspect transforms into the
vital fluids, while the impure aspect
becomes the semen and ovum that have the capacity to
initiate a new life.

Some Tibetan doctors assert that the impure part consists in the menstrual blood. This belief is born out of a mistaken understanding of the passages of The Exegetical Treatise. The Words of the Elder, The Blue Beryl and other well-known commentaries to The Four Medical Treatises make the following statement: "The impure part of the reproductive fluid descends into the lower parts and gradually acquires a generative potency."

Once the reproductive fluid is subdivided into a pure and an impure part, the pure part adds to the bodily constituents, and the impure part flows to the reproductive organs.

Descending through the channels of these organs, it becomes the element capable of fertilization. Some ancient commentarial texts, on the contrary, state that it is the pure part of the reproductive fluids that have generative functions. Such statement, however, does not contradict the former assertion because there are different ways of identifying the pure and impure parts. According to one system, the solid and round part of a substance is called the "pure part" or "essence," while the liquid part, which resembles water, is called the "impure part." According to another system, while the liquid part is called "pure," the solid one is known as "impure." For instance, what is left over of buttermilk after the extraction of butter is considered as a residue of milk, while the solid part, the butter, is said to be the "pure part." In another example taken from the preparation of ale, the cereals left over after the

fermentation are called "residue," while the liquid, i.e., the ale, is said to be the essence.

In the context of medicine, the liquid part of reproductive fluids adds to the blood and thereby nurtures the body, while the dense part flows through the channels of the reproductive organs of the man and woman, and descends further to perform reproductive functions.

In western medical descriptions, we find, for instance, that the hormones generated from the reproductive organs add to the blood and in this way nourish the body, while the ovum that has generative power descends from the ovaries to perform the function of producing a new life. This description seems to have some parallels with the explanation just given.

2 The Primary and Secondary Causes

The formation of a new life is the result of the union of three factors—sperm, ovum and the consciousness of an intermediate being.^① For this union to happen, the sperm of the man and the ovum of the woman must be free of disorders resulting from humoral imbalances. The consciousness is compelled to mingle with the sperm and ovum by the function of the wind of unawareness. When this wind is there, the karmic imprint of past lives leads the consciousness toward its next life. The physical basis for the new body is the five elements, but expressed in two different forms: as the components of the reproductive fluids, and as a de-manifesting version of the five elements, which always coexists with the nature of mind.

Female fertility also involves the vital essences. In prepubescent, pregnant, older and sterile women, the vital fluids do not contribute to the formation of the ovum. In girls under the age of twelve the vital fluids are used in the growth of the body, while those over fifty are weaker, and conditions for formation of ovum are absent.

In all other women, fertilization can occur when the ovum descends into the uterus. If fertilization does not occur, the residue transforms into menstrual blood, which is expelled for a period of three days through the function of the descending wind. During this time, women become weak, their complexion becomes pale, and they experience pain in their breasts, the lumbar region, the neck and the eyes. They also shiver in the sacral area. Soon after the end of the menses, the woman has a strong desire for sexual intercourse with the opposite sex.

^① Intermediate being (bar do'i sems can): the being that dwells in the period that is between (bar do) death and rebirth.

The fertile period starts from the twelfth day after the beginning of the menses and extends over a period of nine or twelve days.^① After this period, the channels of the reproductive channels pause, making fertility impossible. According to the western medicine, the fertile period is around the fourteenth day from the beginning of the menses, including the two preceding and the two days following, for a total of five days. This period approximates the nine days of fertility theorized in Tibetan medicine. On average, the menses begin every twenty-eight days. However, there are women for whom this happens every twenty-one days; consequently the fertile period is earlier.

ལྷ་མཚན་			མངལ་མི་ཆགས་པའི་སྐབས་									བ	མ	བ	མ	བ	མ	བ	མ	བ		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	

The interplay of these three initial factors is the blueprint for all the psychophysical characteristics of the human being. Among the triad of primary causes, the sperm is responsible for the formation of the major and minor bones, the brain, the spinal fluid and thus all channels of the nervous system. The ovum of the mother is responsible for the formation of muscle tissues, the blood as well as the solid and hollow organs. The consciousness of the intermediate being becomes the mind of the human being, i.e., all the cognitive aspects of the consciousness: both sensory perception and ideation. The specific function of each of the five elements in the human embryology should be learned from the Exegetical Treatise where they are explained in detail.

Let us now examine the secondary causes, which determine the sex of the child to be born. The quality of the reproductive fluids plays an important role. If the sperm is abundant and strong, a male will be born; if the ovum is abundant and strong, a female will be born. The sex of the person is also determined by external factors such as the even and odd days the week,^② the

① Some commentaries of The Four Treatises on Medicine state that the fertile period of the woman goes from the first day of the menstrual flow until the twelfth day. It is likely that this interpretation is due to an error in the xylographic reproduction of The Exegetical Treatise in which the correct diction "From the twelfth day after the beginning of the menstrual flux" has been changed to "From the beginning of the menstrual flux, until the twelfth day." In an original manuscript of excellent quality, having two sets of annotations, one in black and the other in red ink, rescued from the destruction of the library of Pelpung monastery in Eastern Tibet, it is clearly written: "From the twelfth day after the beginning of the menstrual flow." No doubt this is the correct version.

② The Exegetical Treatise says that if conception occurs on even days a male will be born, if it occurs on odd days, then a female will be born. Other external factors are illustrated in Tibetan astrology.

waxing and waning phases of the month, the animal sign and the element of the year.

There are other secondary causes that contribute to the development of the embryo, and later a fetus, involving the vital fluids of the mother. The vital fluids are the end products of the assimilation of nutrients of food and drinks. The essence that flows to the reproductive organs of the woman and then, through the right and left channels, is directed toward the navel of the fetus, where it acts as a factor of development of the fetus itself. The Words of the Elder states the following:

From the small lake of the ovaries, the channels like the tubes carry the water of the pure essence. That is responsible for developing the harvest of the thirty-six elements of the fetus field, in the womb of the mother.

3 Embryology

Embryology concerns the study of the causes and conditions for the formation of the body. The Exegetical Treatise describes clearly and in detail, week by week, the development of the embryo and of the fetus. In later commentaries on the Treatise, we often find personal interpretations on embryology that have led to numerous errors. For instance, the paintings in the Mentsikhang in Lhasa that represent the embryonic phases and the different phases of fetal development contradict both the Exegetical Treatise and the modern data on embryology discovered by western science.

The initial draft of the human body forms between the first and the third week from conception. According to Tibetan medicine, the "basis" for the male or female gender of the fetus appears in the fourth week (21-28 days) and its presence constitutes evidence that the embryo already represents the human being that it will become. The development of the embryo and of the fetus that take place in each week is described in the following paragraphs, following closely the description given in the Exegetical Treatise.

1st week

In the first week of the first month, the [embryo] is a mixture of the sperm and the ovum that resembles milk to which culture has been added.

From the moment in which the sperm, the ovum and the consciousness unite in the uterus and over a period one week, the life-sustaining wind

(Srog rlung སྒོག་རླུང་) arises from the fundamental consciousness.^① This wind causes the cells of the sperm and those of the ovum to mingle and to become an indivisible unity, resembling the mixture of the culture and milk that produces curd.

2nd week

In the second week [the embryo] coagulates.

In these seven days, the "cohesive wind " (las rlung kun tu sdud pa ལས་རླུང་ཀུན་ཏུ་སྤུད་པ་) develops from the life-sustaining one and causes the embryo to coagulate and become denser.

3rd week

In the third week [the embryo] resembles curd.

In the third week, the wind called "unbearable" (bzod dka'i rlung བཟོད་དཀའི་རླུང་) develops. This wind causes the embryo to solidify in the manner of the formation of curd. In this period, the gender is not yet formed, thus, following the appropriate methods it is possible to influence the gender to one's own liking, female or male.^②

After this week and up to the delivery, the mother must take great care of her diet and conduct for the sake of not putting at risk the life of the fetus or her own. In particular, she should avoid frequent sexual relations, excessive efforts, sleeping during the day and staying awake at night, excessive effort in the expulsion of feces and urine or holding them. She must avoid foods and drinks that produce excessive heat or that have a sharp or heavy potency. She should also avoid foods that cause constipation or hinder normal urination. She should neither undergo treatments involving purgatives or bloodletting, nor use enemas or strong emetics. This should be avoided because of the harm that these foods and behaviors can cause to the bodily constituents of the mother. In fact, if her bodily constituents weaken, the primary basis for the development of the fetus will be lost, causing the expulsion or death of the fetus. In some cases, the fetus may die in the uterus due to the imbalance of wind.

^① See note

^② The methods to determine the sex of the fetus include medications, and the wearing of a representation of a male or female child together with other substances.

4th week

In the fourth week the hard, liquid and dense aspects [determine] male, female, and neuter [gender].

In the fourth week, the wind called "activating " (*rab tu bed pa'i* *rlung* རབ་ཏུ་བེད་པའི་རླུང་) determines the gender of the draft of the human body. The consistency of the area where the genitals will develop reflects the gender of the fetus. The consistency gor gor po, that means "slightly hard" or "tense," is typical of the male sex, while the female sex has a liquid aspect known as mer mer po. The jelly-like consistency nar nar po characterizes of a "neuter" and the various alterations of the male and female genitals is associated with this.

At this point the woman can understand she is pregnant because she experiences the following symptoms: she feels heaviness in the womb, her complexion turns ugly, and she loses her appetite. She yawns frequently, likes to stretch her limbs, feels heavy and lethargic, her breasts swell, she prefers sour tastes, and craves particular foods. If the pregnant woman is refused the food she likes to eat, she incurs a risk of premature childbirth and the fetus may die, or the birth of a child with physical defects. Therefore, if the woman desires to eat unhealthy foods, she should be given them alternately with foods healthy for both the mother and the fetus.

5th week

In the fifth week, i.e. in the second month, the navel,
which is the beginning of the body, forms.

During the fifth week, the "super-cohesive wind" (*yang dag sdud pa'i* *rlung* ཡང་དག་སྤུད་པའི་རླུང་) gives the fetus a compact nature and develops the umbilical area, the energetic center of the organism from which channels, essences and winds originate.

6th week

Beginning at the umbilical region, the vital blood vessels
and the life channel develop.

In this period, the "extending wind" (*rgya chen po'i* *rlung* རྒྱ་ཆེན་པོའི་རླུང་) from the navel energetic center develops the three principal channels that sustain life. The three channels are the white channel, source of the entire nervous system, and the two black channels, i.e., the aorta, the vena cava and the source of the vascular system. The Tibetan medical text states that during this period the minor channels also begin to emerge. The Words of the Elder says the following:

Certain ancient commentaries explain that during the sixth

week the body is formed with a channel in the head, two in the arms and two at the genitals.

7th week

In the seventh week, the draft of the eye sense organ emerges.

In this period, the wind called "spiral wind" ('khyil ba'i rlung འཕྱིལ་བའི་རླུང་') characterized by an expanding circular movement causes the formation of the visual sense organ.

8th week

In the eighth week, following this phase, the head forms.

In this period, through the function of the wind that "reshapes," (bzlog cing bsgyur ba'i rlung བརྫོག་ཅིང་བསྐྱར་བའི་རླུང་') the embryo acquires a definite aspect. The shape of the head becomes complete in its characteristic traits.

9th week

In the ninth week, there is formation of the superior and inferior parts of the trunk of the body.

In this period, the wind that "differentiates" (rnam par pa'i rlung རྣམ་པར་འབྲེད་པའི་རླུང་') produces the superior and inferior parts of the trunk of the body. In tantric literature, the period that goes from the first week when the draft of the body is formed, till the ninth, is called the "period of the fish" because the development of the three life channels, and, in particular, of the aorta (whose function takes place principally in the central part of the body) produces the long shape of the embryo.

10th week

In the third month, at the tenth week, there is the formation of the initial protuberance of the shoulders and hips.

The wind that "solidifies" (Sra ba'i rlung སྤར་བའི་རླུང་') causes the formation of the initial protuberance of the shoulders and hips that serve as the basis for all the bones of the limbs. In this period, through the function of the wind, the fetus acquires the capacity to move.

11th week

In the eleventh week, there is the formation of the subtle forms of the nine faculties.

Through the function of the wind that "opens the senses" (bu ga snang ba'i rlung བུ་ག་སྙང་བའི་རླུང་), the subtle forms of the nine faculties^① emerge, like the subtle form of the eye organ called zama flower.

12th week

Through [the function of [the "Yonpo wind" (ཡོན་པོའི་རླུང་),
In the twelfth week, the initial shaping of the five solid organs takes place.

13th week

Through [the function of [the "puju wind" (spu rgus kyi rlung སུ་རྒུས་ཀྱི་རླུང་), in the thirteenth week, the initial appearance of the hollow organs takes place.

14th week

In the fourth month, in the fourteenth week, the initial formation of the arms and thigh bones takes place.

In this period, the wind called "strand's tip" (sdud pa'i kha'i rlung སུད་པའི་ཁམའི་རླུང་) shapes and give consistency to the bones (humerus and the femur) and tissue of the upper and lower limbs.

15th week

Through [the function of] the wind called "lotus" (pad ma'i rlung པད་མའི་རླུང་), in the fifteenth week, the initial formation of the bones of the forearms (ulna and radius) and of the lower legs (tibia and fibula) take place.

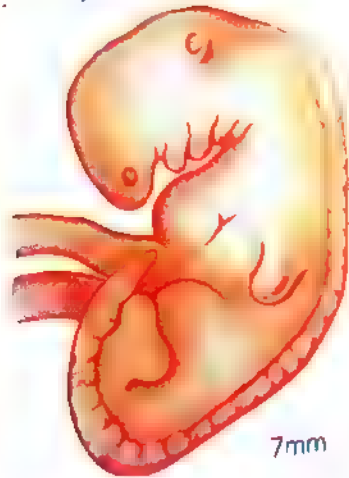
16th week

In the sixteenth week, the initial formation of fingers and toes take place.

In this period, the wind called "path of ambrosia" (bdud rtsi 'gro ba'i rlung བདུད་རྩི་འགོ་བའི་རླུང་) gives shape to the bones of the fingers and of the toes.

^① The nine faculties refer to the two eyes, the two ears, the two nostrils, the mouth and the two orifices of the genitals and the anus that perform respectively sexual and purgative functions. The subtle form of the organs refers to the neural structure that ensures the sensorial functions, the retina for the eye for instance.

28 days old



17th week

In the seventeenth [week], the channels that connect the outer and inner parts of the body form.

The wind called "Dri dong" ('bri gdong gi rlung འབྲི་གདོང་གི་རླུང་) develops the net of blood vessels (of the veins and arteries) and the pathways of nerves (which originate from the three main channels of life) that connect different parts of the body.

In the tantric literature, these two months in which the [bones] of the limbs develop are called "the period of the turtle."

18th week

In the fifth month, in the eighteenth week the muscular and adipose tissues become activated;

In this period, the wind called "stainless wind" (dri ma med pa'i rlung འབྲི་མ་མེད་པའི་རླུང་) begins to differentiate the residue from the pure parts of the bodily constituents of the fetus. The functions of the muscular and adipose tissues are activated, and the metabolic processes linked to the growth of the organism begin to develop.

19th week

Through [the function of] the "subtlest air" (shin tu phra ba'i rlung ཤིན་ཏུ་ཕ་བའི་རླུང་), in the nineteenth week, the formation of tendons and ligaments takes place.

20th week

In the twentieth week, the bone and marrow tissues develop.

In this period, the wind that "stabilizes" (shin tu brtan pa'i rlung ཤིན་ཏུ་བརྟན་པའི་རླུང་) strengthens the bones, and contributes to the formation of the marrow tissue.

21st week

In the twenty-first [week], the skin covers the entire body.

The wind that "creates perfectly" contributes to the maturation of the epidermis that covers the outer part of the body with skin like a film on milk.

22nd week

In the sixth month, in the twenty-second week, the orifices of the nine faculties open completely.

In this period, the wind called "victorious" (kun tu rgya ba'i rlung ཀུན་ཏུ་རྒྱ་བའི་རླུང་) opens the orifices of the nine faculties.

23rd week

Through the function of the wind that "preserves the purity" (*yang dag 'dzin pa'i rlung* ཡང་དག་འཛིན་པའི་རླུང་), in the twenty-third week, hair, body-hair and nails begin to grow.

24th week

In the twenty-fourth [week], the maturation of the solid and hollow organs takes place.

The wind called "swinging" (kun tu 'phyo ba'i rlung ཀུན་ཏུ་འཕྱོ་བའི་རླུང་) ripens the solid and hollow viscera. The fetus acquires the capacity to experience pleasant and unpleasant sensations.

25th week

In the twenty-fifth-week, the flow of the air starts to circulate.

The wind that "preserves the citadel" (Grong khyer 'dzin pa'i rlung གྲོང་ཁྱེར་འཛིན་པའི་རླུང་) produces the movement of the air through the orifices.

26th week

In the twenty-sixth week, [the fetus] acquires clarity of memory.

Through the function of the wind that "actualizes birth" (*skye ba mngon par dran pa'i rlung* སྐྱེ་བ་མངོན་པར་དྲན་པའི་རླུང་), the fetus acquires a clear memory that enables it to recollect events from the past lives.

27th-30th week

The subtle components of different elements that constitute the body grow, and thus reach their maturation.

In the seventh month, from the twenty-seventh to the thirtieth week, all the parts of the "fetus" body are clear and complete.

In the twenty-seventh week, the maturation of the fetal organism is effected by the wind called "great beneficial" (*sman yon chen po'i rlung* སྐྱུ་ཡོན་ཆེན་པོའི་རླུང་); in the twenty-eighth by the wind called "holder of the flower" (*me tog 'dzin pa'i rlung* མེ་ཏོག་འཛིན་པའི་རླུང་); in the twenty ninth by the wind called "garland of flowers" (*me tog phreng pa'i rlung* མེ་ཏོག་ཕྲེང་པའི་རླུང་), and in the thirtieth by the wind called the "metal gate" (*lcags kyi sgo mo'i rlung* ལྷགས་ཀྱི་སྐོ་མོའི་རླུང་).

31st 35th week

Through the [function of] a single wind which "gather flowers" (me tog sdud pa'i rlung རེ་ཏོག་སྒྱུར་པའི་རླུང་), in the eight month, from the thirty-first week to the thirty-fifth, all the components of the fetus' body enlarge and the radiance alternates between the mother and the son.

The Words of the Elder states as follows:

Mother and child, in turn, appropriate the vital fluids, the end result of the cycle of the nutritional essence from the foods. At times, the mother absorbs the vital fluids while the fetus is deprived of them; sometimes the fetus absorbs the vital fluids and the mother does not. Although rarely occurring, a premature birth can involve many risks. If the birth occurs when the mother is absorbing the vital fluids there is the risk that the child may die. During the period when the fetus is receiving the essence, the risk of death is incurred by the mother.

In tantric literature, four months, from the fifth to the eighth, are called the "period of the pig" because the fetus is sufficiently mature to be able to absorb through its mouth the impure substances of the uterus.

36th week

In the ninth month, during the thirty-sixth week, originates a manifest discontent.

In this period the fetus experiences a manifest discontent owing to the unpleasant environment of the uterus.

37th week

In the thirty-seventh week the urge grows to turn upside down.

In the fetus, unhappy with its environment, the desire grows to go elsewhere. This period is called "the urge to turn upside down."

38th week

Through the function of the "directional " wind (thog rken gyi rlung ཐོག་རྒྱུ་རྒྱུ་རླུང་), in the thirty-eighth week, the fetus turns upside down and he or she is born.

Childbirth should occur at this stage, but, it may be delayed or impeded as a result of three factors: a) hemorrhages that have affected the mother in the course of her pregnancy and that have not allowed the normal growth of the fetus; b) excessive weight of the mother that has reduced the elasticity of the vaginal walls; c) imbalance in the descending purgative wind caused by

unhealthy diet and conduct. The Exegetical Treatise describes the external signs, sensations and dreams that give indications concerning the gender of the fetus in the following terms:

If the womb of the mother is higher at the right hip, if she feels light, dreams of man, and her milk develops first in the right breast, a male will be born; If she desires to meet man, enjoys singing and dancing and wears ornaments, and has signs opposite to those just mentioned, a female will be born; When the signs are mixed, a hermaphrodite will be born; and, if the womb of the mother is low at the center and high at the hips twins will be born.

Symptoms of an imminent childbirth include lethargy, loosening of the womb (in particular of its lower parts), backache, ache in the sacral and lumbar region, pain and heat sensation in the womb and in the vagina, loosening and opening of the vagina and involuntary loss of urine. During childbirth the woman must be assisted by a midwife or other woman who have had experience of childbirth, and advise her on the position to adopt and on the muscular contractions she must perform. After birth, the mother needs to rest, and regain her strength by eating nutritious foods, such as meat broth, barley soup, and milk soup. She must remain in a quiet environment, be protected from confusion, and wear warm clothes.



Chapter V

Physiology

The bodily constituents are subdivided into two groups: those subject to aggression and the aggressive ones. The seven bodily constituents and the three impurities that can be subject to the aggression of the three pathogenic humors of wind, bile and phlegm are included in the first group. The pathogenic humors themselves comprise the second group. When the mutual balance that relates wind, bile and phlegm is altered, the humors transform into agents that cause illness and at the same time the organic manifestation of the disease.

1 The Seven Bodily Constituents and their Functions

Chyle or Nutritional Essence

The nutritional essence derives from the ingestion of foods, characterized by the six different tastes that are amalgamated by the decomposing phlegm, and are then digested by digestive bile. The end product of the nutritional essence is formed through the action of the fire accompanying wind whose function is that of separating the pure part from the residue. The pure part of the nutritional essence is conveyed to the liver where it produces the blood and feeds the other bodily constituents. The residue is transformed into urine and feces.

Blood

Its function is to develop the moist components of the body and, in particular, it serves as the crucial factor that maintains life.

Muscle Tissue and Connective Tissue

These have the function of giving shape to the structure that envelops the bones and that is like the plaster on the walls of a house.

Adipose Tissue

It serves as a lubricating factor for the various parts of the body to which they own their oily aspect.

Bone Tissue

It provides the stability and sturdiness of the entire body.

Marrow Tissue

It develops physical strength and virility.

The Reproductive Fluids

They produce the vital fluids and perform the reproductive functions.

The Three Impurities or Excretions**Feces**

They serve as a vehicle for the residue of the nutritional essence that is gradually expelled through them.

Urine

It collects the residue of the nutritional essence that has a moist aspect and expels it in the form of liquid.

Perspiration

It softens the skin and at the same time opens the obstructed pores.

2 The Energies that Act on the Body

When the seven bodily constituents and the three impurities are not subject to defects or malfunction caused by an excess, lack or mutual alteration of the three humors, the body remains in its healthy condition. “Heat” is the determinant factor in maintaining balance in the organism and thus health. The term “heat” (me) refers to the metabolic aspect of energy (drod) that is the basis of the digestive functions and of the separation of the nutrition essence from the residue.

Metabolic heat is produced mainly by the humor’s bile in its function of digestive bile, but it is present in, or acts on, each and every humor, bodily constituent and impurity.

The digestive bile is situated principally in the small intestine between the stomach (where food has not yet been assimilated) and in the large intestine

(where food has already been assimilated). It works like a retention valve for the nutritional essence inasmuch as it prevents the nutritional substances that have not yet been fully digested from flowing into the colon.

In the stomach the heat performs its digestive function by interacting with the decomposing phlegm. In the intestine, interacting with the fire-accompanying wind, it separates the pure part of the nutritional essence from its residue. The former is conveyed to the liver, and the latter transforms into impurities or excretions.

In summary, good health is maintained by virtue of good digestive heat or digestive bile, on which the metabolic energy of the bodily constituents depends. By virtue of good digestive heat, one acquires sharp intelligence and determination in whatever one does. The body acquires inner and outer radiance, and one lives long. On the contrary, if the power of the digestive heat weakens, foods will not be properly digested. Symptoms of weakening of the digestive heat include swelling and flounce of the stomach, vomit, diarrhea, and the weakening of the body itself. In particular, with the weakening of the digestive heat, residue flows into the channels of the nutritional essence, and as result of this, the quality of blood and other bodily constituents deteriorates, causing illnesses of a consumptive nature such as the tumors and pathologies that manifest as pallor, enemata and dropsy. To preserve optimal digestive heat, one should eat foods easy to digest, do physical exercises, wear warm clothes, take medications such as “pomegranate 4” and “the Serdrudongne”.

3 The Function of the Digestive Heat

The digestive process begins with the intake of foods and their arrival in the stomach through the function of the life-sustaining wind. In the stomach, the liquid component of the foods is fragmented into smaller particles, and these smaller particles break down the solid parts. The oily components of the foods become ductile conferring the same quality to the entire content of the stomach. Then, the digestive bile is activated and potentiated by the fire-accompanying wind. The heat increases and is thus capable of digesting the foods. This phase resembles the preparation of the “khenda”, or extract of medicinal substances produced by boiling them down.

Let us see the digestive process in detail. The foods, prior to digestion, possess six different tastes that reflect the alimentary composition of the foods themselves. For instance the sweet taste is associated with the earth and water elements, and the pungent with the fire and air elements. During the

digestive process, the foods assume a different taste according to the humor that is acting upon them. During the gastric mixing, the food is under the action of the decomposing phlegm that has the nature of the earth and water elements. For this reason, in this phase of digestion, the food content of the stomach has a slightly sweet taste, and has the aspect of an amalgam with bubbles that reflects the moist and bubbly quality of the phlegm. As a result of the sweet taste, the function of the decomposing phlegm is made potent, forming the amalgam. The taste of the food content of the stomach is changed by the digestive bile (heat) that confers to the food the property of the fire element which constitutes its nature; this, with the phlegm's property of the earth element (residue of the first part of the digestive process), gives the food a sour taste. As a result of the acidity of this taste the function of the digestive bile is made potent. The fire-accompanying wind performs the principal function in the digestive process, that of separating the residual substances from the nutritional essence. In this phase the contents of the stomach acquire a bitter taste that corresponds to the characteristics of the wind element. The bitter taste, the function of the fire-accompanying wind, is made potent. Consequently the metabolic heat increases.

Thus, different tastes increase the humeral potencies that function in the digestive tract, and they have an effect on the humors that function in other parts of the body, too.

The foods carry out their nutritional action on the basis of their characteristics. Their characteristics vary because the composition of the food is different in terms of the elemental particles of earth, water, fire and air, plus space or in another classification: wood, fire, earth, metal and water.¹ The foods (expressing energies of different natures) also correspond to the constituents of the various parts of the body. The elemental properties of the foods add to their respective counterparts in the organism. Accordingly the Exegetical Treatise states the following:

The properties of foods that have the nature of the elements develop the elements that constitute the organism.

For instance, the earth element in the food feeds the earth element in the body. The water element in the food feeds the water element in the body. The

¹ These represent properties according to elemental astrology.

fire element in the food feeds the fire element in the body. The air element in the food feeds the air element in the body.

The space element in the energy of the food keeps the holes of the body clean. Each of the five elements contributes to the development of the 7 bodily constituents, the 3 humors and the 3 impurities.

We can also see it in the following way.

From the food:

Wood element feeds the channels and the ligaments.

Fire element feeds the metabolic heat.

Earth element feeds the muscle and connective tissue.

Metal element feeds the bones.

Water element feeds the blood, the lymph and all the liquids in the body.

Progressively, the foods that have been broken down by the decomposing phlegm are moved and digested in the upper part of the small intestine by the digestive bile. Here, through the function of the fire-accompanying wind, the pure parts are separated from the residue. A further separation occurs in the lower part of the small intestine. In the large intestine, the solid part of the residue is transformed into feces; the liquids ones pass through the intestinal channels, flow to the kidneys and transform into urine that deposits in the bladder.

The heat (i.e., metabolic energy) of each of the bodily constituents purifies the nutritional essence, and transforms its pure part into the bodily constituents themselves.

Let us examine more closely the different phases of this process: the pure nutritional essence, separated from the residue, flows through very subtle channels from the intestine to the liver. In the liver the nutritional essence loses its color, resembling that of melted butter, and acquires the color of the blood into which it is transformed. The residual part changes into the fluid present in the stomach and other parts of the digestive tract¹.

The blood is purified by the color-producing bile; the pure parts becomes muscular and connective tissue; the residue transforms into gall.

Muscular and connective tissues are in turn purified; their pure parts change into adipose tissues, and the residual parts transform into skin tissue.

The pure part of the adipose tissue contributes to the bone tissue while the residue becomes perspiration and the oily aspect of the various bodily components.

¹ This fluid is known in Tibetan medicine as bad snabs or dense phlegm.

The pure part of the purified bone tissue contributes to the marrow tissue, while the residue adds to teeth, nails and body-hair.

The marrow tissue is separated into an impure part that gives the oily aspect to skin and feces, and a pure part that produces the reproductive fluids (or so-called white and red constituents). The reproductive fluids in turn are "distilled." Their residue transforms into sperm and ovum, the seed of the reproductive capacity, while the pure part transforms into vital fluids, the ultimate product of their cycle of the bodily constituents.

The vital fluids, as the quintessence of all bodily constituents, enter into the blood vessels that sustain the life (the arteries in particular) and become inseparable from the pure essence of blood. From the heart, the vital fluids spread into all parts of the organism, producing longevity, perceptive clarity and the radiant aspect of the body.

The cycle that begins with the chyle and culminates in the formation of the reproductive fluids takes place during a period of six days (i.e., the potency of the assimilated foods continues its action for six days). Certain types of medications prepared with poisonous herbs (aconite for instance) and certain aphrodisiacs are quickly assimilated, and produce their effects in a very short time. On the contrary, certain poisonous preparations can produce their effects after several years. The majority of natural medications manifest their potency during a period of twenty-four hours.

4 The Three Pathogenic Humors

Let us now explain the functions of the three pathogenic humors. When the three humors—wind, bile and phlegm—remain in their location and at their normal level, they represent the substratum for the condition of physical balance that characterizes the state of health. Alteration changes them into pathogenic agents that cause illnesses that may lead to the destruction of the organism. The characteristic basis of the three humors' are described in the following paragraphs.

Wind:

"Wind" refers to the breath or to the wind that moves in the channels, and to all other energies of the organism that have the nature of movement.

There are five types of wind:

"The life-sustaining wind" is the indispensable condition for the formation of the embryo, and is the source of all other types of wind. This wind

dominates in the region of the brain. The pathways in which it flows include the throat and the chest, where it presides over the functions of swallowing, breathing, salivation, sneezing. It produces the clarity of the intellect and, (flowing in the eyes, ears, nose, tongue, and skin) the sharpness of (visual, auditory, olfactory, gustatory and tactile) sense perceptions.

"The ascending wind," located in the chest region, flows through the nostrils, in the tongue, and in the glottis, where it presides over functions related to speech. This wind gives strength, courage and optimism; it clears the skin and sharpens the perception of the senses.

"The pervasive wind," located in the heart, moves in all the parts of the body, on its surface and in its depths. This wind serves as the base for the voluntary movements (of the limbs for instance) and involuntary ones (the opening and closing of the sphincters for instance).

"The fire-accompanying wind," located in the digestive tract and, in particular, in the large intestine, moves in the intestine and in the various solid and hollow organs, where, together with the bile, it presides over the digestive functions—the separation of the nutritional essence from the residue and the maturation of the bodily constituents.

"The descending purgative wind" is located in the anal region, in the bladder and in the thighs, where it presides over the functions of ejaculation in man and orgasmic liquids in woman, of expelling menstrual blood, feces and urine as well as of contracting and opening the uterine passage in the case of childbirth.

Bile:

"Bile" refers to the heat present in each part of the body, in the bodily constituents and in the impurities. There are five types of bile:

"The digestive bile" is located in the small intestine, where it presides over the function of digesting foods, of separating the nutritional essence from the residue, and of producing heat (metabolic energy) in all parts of the body. Moreover, it has the function of activating and sustaining the other types of bile.

"The color-producing bile," located in the liver, presides over the function of producing the pigmentation of each of the bodily constituents and of the three impurities, as the yellowish pigmentation of chyle and the red color of the blood.

The energizing bile, located at the heart, serves as the basis for the analytical capacity to discriminate the values of different actions. It develops personal pride, intellectual brightness, and joyful effort in accomplishing one's aims.

"Vision-producing bile," located in the eyes, is responsible for the clear perception of visual forms and colors.

"Complexion-clearing bile," located in the skin, produces a healthy and luminous epidermis.

Phlegm:

"Phlegm" refers to all the wet and moist components of the organism, with a liquid and cool nature. Phlegm has five aspects:

"Supporting phlegm," located in the chest, is responsible for the normal functioning of the other four types of phlegm. It appeases thirst even without drinking.

"Decomposing phlegm," located in the stomach, is responsible for the process of breaking down the food-content of the stomach and making it into an amalgam that thereby becomes soft, as matter being in decomposition.

"Gustatory phlegm," located in the tongue, serves as the basis for gustatory sensations.

"Satisfying phlegm," located in the head, has the function of giving a sense of satisfaction of limiting the time of perception so as to allow the attention to shift from one object to the next.

"Connecting phlegm," located in the major and minor joints, performs the function of connecting the joints, allowing movements of different sections of the body.

In summary, the general functions of wind include breathing, physical movements, intellectual activity, expulsion of excretions, causing the seven bodily constituents to flow in their appropriate channels, and sense perception clarity. The general functions of bile include digesting foods, assimilating foods rapidly which induces the desire to eat and drink, producing the healthy tone of the body, infusing with courage the undertaking of various actions, and endowing the person with capacity of analytical judgment. The general functions of the phlegm include providing stability for body and mind, tolerance of harm received, patience in accomplishing one's aims, connecting the surface of the articulations, making the epidermis white, oily and smooth, and inducing sleep.

The humors present different characteristics. While wind has six characteristics, bile has seven. And phlegm has six. They are listed in The Exegetical Treatise as follow:

Wind has the characteristic of being coarse and light,

cold and subtle, hard and mobile. Bile has the characteristic of being oily, sharp, hot, light, smelly, purgative and moist. Phlegm has the characteristic of being oily and cool, heavy and blunt, smooth, steady and viscous.

The humor of wind and the external air parallel each other. The same characteristics of the external air are found in the wind in the body. Similarly, the characteristics of the phlegm reflect the nature of the earth and of the water element combined. The hot, sharp, oily and light nature of the bile reflects the characteristics of the fire element. The purgative, moist and smelly characteristics of the bile are related to its function and are not qualities inherent to its nature.

Some Tibetan doctors, contradicting both the medical treatises and common sense, explain that the decomposing phlegm, the digestive bile and the fire-accompanying wind are all located in three sections within the stomach. The decomposing phlegm actually resides in the stomach. But, though The Exegetical Treatise mentions the stomach as the fire-accompanying wind's location, the tenth chapter of the same text specifies the large intestine as the particular location of the fire-accompanying wind. In fact, the large intestine is the particular location of the fire-accompanying wind. The digestive bile according to The Treatise dwells in the small intestine, between the stomach and the large intestine, where it digests foods and extracts their nutrients, and separates it from the residue. The treatise also clearly explains that the digestive bile assists in digestion of foods in the upper part of the intestine, and extends its function to the duodenal region. In the lower part of the intestine (that is connected to the colon), the digestive bile assists in separating the nutrients from the residue.

If these three humors were all to dwell in the stomach, the digestive functions performed by these three humors would be the following: decomposition of foods by the phlegm, digestion and extraction of the nutrients by the digestive bile and the fire-accompanying wind. These reactions would all occur and be completed in the stomach itself. In this case, the small intestine and the large intestine would not perform any functions related to the digestion and assimilation of foods. But, it is obvious that they do perform such functions.

Chapter VI

Blood Vessels and Nervous Channels

The channels that ensure the flow of blood and connect the different parts of the body are of two different types: the blood vessels, distinct as arteries (or pulsating channels) and as veins (or non-pulsating channels), and the nervous channels also called "water" or "white" channels.¹

The Exegetical Treatise classifies these channels into four categories: channels of the embryonic formation, channels of existence, connecting channels and channels of the lifespan principle.

1 The Channels of Embryonic Formation

During the development of the embryo, three (principal) channels originate from the navel: the vena cava (vein channel), the aorta (or wind channel) and a nerve channel that are the base for the life sustaining wind.

The following is the description of each of these channels from the Exegetical Treatise. It states as follows:

1st Channel

A channel ascends and forms the brain on the basis of which, delusion exists. From [delusion] arises phlegm that is [likewise] located in the upper part of the body.

The Words of the Elder states the following:

Among the three channels that originate [from the navel], that in which the lunar or water element flows, rises in the left part of the body and unites the heart, throat, and the top of the head. Between these regions, this white channel ascends and finally gives rise to the brain. The brain is the substratum of the mental states of delusion and of the phlegm. Delusion itself seems to arise from the area of the head since dullness and lethargy are felt principally in that area. From delusion originates phlegm. Thus, the primary cause [the brain] the secondary condition [delusion], and their result [i.e., phlegm] reside in the upper part of the body.

The Exegetical Treatise states as follows:

¹ Water or white channels are so-called because, according to Tibetan medicine, the white constituent and other liquid substances move in them.

2nd Channel

One channel extends itself toward the center [of the body]. Aggression that depends on it and on the blood, produces heat, and thus is located in the middle part [of the body].

The Words of the Elder states the following:

One channel in which blood, or fire element, flows extends itself into the central part of the body and inserts itself between the right and left lobe of the liver, connecting to the blood vessels which gather the nutritional essence in the liver.¹ At the level of the thirteenth vertebra,² two other vessels branch off from this channel forming the vein and arterial systems. The blood acts as the substratum of aggression and of the bile [or heat]. In turn, aggression exists depending on the vessels and blood. The blood produces the heat [or bile]. Therefore, the primary cause [blood], the secondary condition [aggression] and their result [bile or heat] reside in the middle part of the body. In fact sudden bursts of anger seem to originate from and disturb the central region of the body..

The Exegetical Treatise states as follows:

3rd Channel

Descending toward the lower part, one channel forms the genitals, and on the basis of the male and female genitals, desire develops; the desire produces wind, thus it is located in the lower part of the body.

In addition, The Words of the Elder states the following:

One channel in which the wind or element of primordial awareness flows ascends straight, as explained before, toward the upper part of the body. An extremity of this channel descends to the lower part [of the body] and there it forms the channel of the genitals where pleasure is experienced. In this region the reproductive fluids serve as the substratum for both desire and wind. Desire, in turn, seems to exist in relation to the genital region of the man and the woman. Desire produces wind, thus the primary cause [i.e., the reproductive fluids], the secondary cause [i.e., desire] and their result [i.e., wind] are localized in the lower part of the

¹ This second channel includes the vena cava and the aorta. The third channel instead describes the lower part of the aorta and its function.

² In western medicine the vertebrae are: seven cervicals, twelve thoracic, five lumbar, five sacral and three or five caudal fused in the coccyx. Tibetan medicine subdivides vertebrae into three categories: cervical (mjing tshigs), spinal (sgal tshigs) and caudals (gzhus chung). In the Jang school the seventh cervical vertebra (an stong), of the Western system is the first vertebra. In the Zur school the first thoracic vertebra of the Western system is considered the first vertebra.

body. This explanation is from the point of view of the principal function and location of the three humors.

2 The Channels of Existence

Four channels known as, "the Four Great Vessels of Existence" form the real basis for all functions of the organism. They are so-called because, once developed (with their branches) in the embryonic phase they exist in the body through the entire life until death performing different functions. Connecting (through the senses) to their respective objects these channels serve as the basis for the experience of pleasant and unpleasant sensations. At the same time, branching off from their respective locations towards all parts of the body they preserve the organism by nurturing and regenerating its constituents.

About the first channel of existence, The Exegetical Treatise states as follows: "The channel of sensory perception is located at the level of the brain."

The first channel of existence is located at the level of the brain. This channel radiates five hundred minor channels.¹ Circulating in these, the life-sustaining wind and the other secondary winds² empower the senses to perceive their respective objects. These channels are the support for the non-conceptual consciousness that perceive concrete objects.

The Words of the Elder states as follows:

Twenty-four nerves reside, like a king, in the cerebellum which is called the "spiral channel." From these channels branch off five hundred minor ones. Serving as the support for the five secondary winds, these channels are responsible for the visual perception of forms.

About the second channel of existence, The Exegetical Treatise states the following: "The channel that supports the mental consciousness is located in the heart."

The second channel of existence resides in the heart from which it radiates five hundred minor channels. These channels are the support for the conceptual consciousness (i.e., ideation capacity) and of the sense of self.

¹ The number of 500 channels is indicative of a great number of channels; it does not imply that there are exactly 500.

² Secondary winds, see ch.VII

The Words of the Elder states the following:

Twenty-four nerves resides like a king, connected to the nervous channel of the heart called "lady of noble mind."

Five hundred minor channels radiate from them. These channels produce the six consciousness that give clarity to the mental sense, which is at the base of memory and the sense of self. These channels are therefore the support of the conceptual consciousness that apprehends abstract phenomena.

As for the third channel of existence, The Exegetical Treatise states that "the channel of the formation of the body is located at the level of the navel."

The third channel of existence is situated at the level of the navel. Five hundred minor channels radiate from it. This channel is responsible for the formation and the development of the body, from the very first embryonic phases until death.

Furthermore, concerning this, The Words of the Elder describes as follows:

Twenty-four channels reside, like a king, connected to the channel that stands right at the center of the navel called "doctrine." They act as a support for the life and development of the cells. Five hundred minor channels radiate from them. These channels cause the initial formation of the organism, develop it during the life till death.

As far as the fourth channel of existence is concerned, The Exegetical Treatise maintains that "the channel that ensures the family lineage is located at the level of the genitals."

The fourth channel of existence is situated at the level of the genitals with its crown of five hundred minor channels. On it depends the increase of the stock.

Concerning this, The Word of the Elder portrays as follows:

Twenty-four channels reside, like a king, at the genitals. They are connected to the "channel of the gender" and there, act as the support for sexual pleasure. They radiate five hundred minor channels. These channels have reproductive functions and family.

In this description of the channels of existence, only four of the so-called five chakras or centers of diffusions of channels are mentioned. The reason for this is given in *The Words of the Elder* as follows:

The center of the channels at the throat has primarily a gustatory function, and only in a minor way that of feeding the bodily constituents. It is for this reason that this center of channels at the throat has not been explicitly mentioned. Nonetheless it could be mentioned with the following words: "The channels connected to experiencing foods and drinks are the channels of existence that reside at the throat. They radiate five hundred minor channels."

3 The Connecting Channels

The 24 Dark Blood Vessels

The channels that connect different parts of the body and thereby sustain life are classified into two main categories: the dark channels in which blood flows and, the white channels where other fluids (i.e., the white constituents etc.) flow.

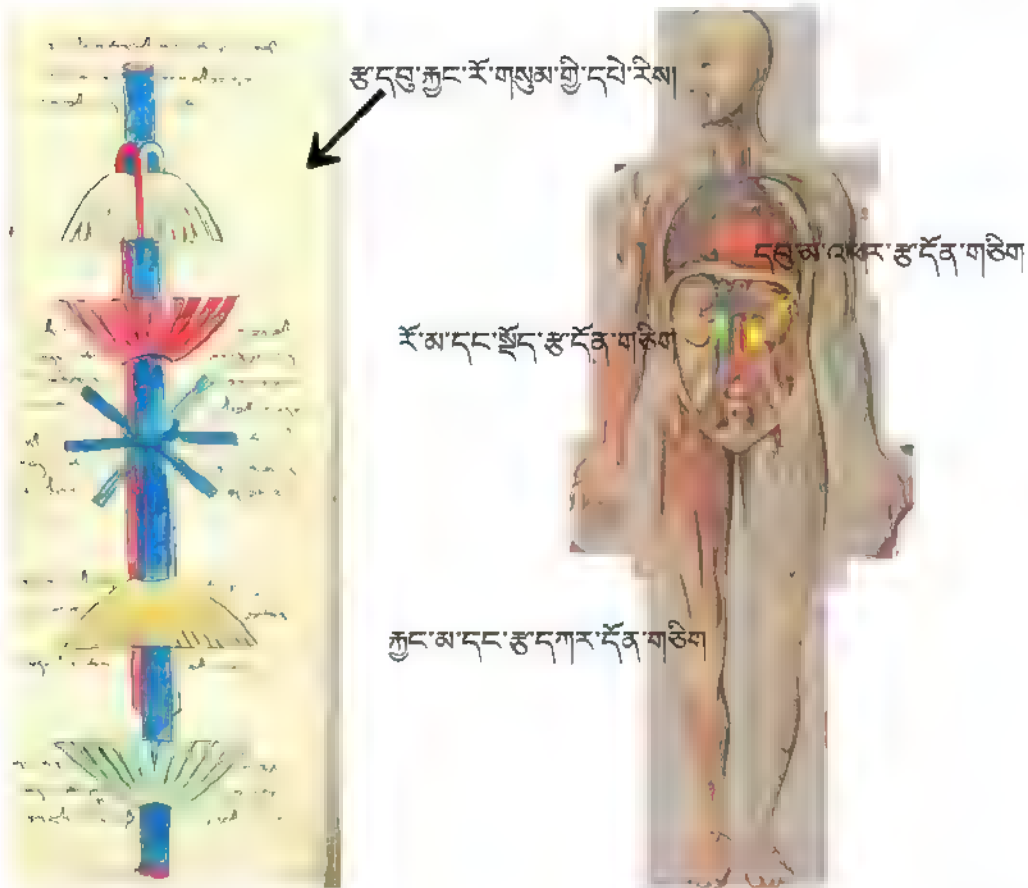
The dark channels that perform the primary function of feeding the blood and the muscular (and other) tissue are also divided into two types: First, the right channel roma or vena cava, has the size of an arrow of medium thickness and it is connected to the liver; it carries blood exclusively. Second, Parallel to the channel roma flows the "central channel" or aorta, which carries at the same time wind and blood.

The vena cava and the aorta rise straight as columns in the center of the body connecting to all solid and hollow organs. From their upper and lower ends branch off the veins and arteries of the four limbs and of the head.

The Exegetical Treatise describes the vessels that branch off from the main dark channels in the following way:

On the trunk of the blood vessels of life, like branches, spread twenty-four great vessels that feed blood and flesh; These include eight hidden vessels connected to the solid and hollow organs and the sixteen externally evident vessels, connected to the limbs. These [sixteen] branch off in seventy-seven veins that are ideal for the therapy of bloodletting, and one hundred and twelve

vulnerable arteries. In total, a hundred and eighty-nine secondary vessels, from which branch off three-hundred and twenty vessels in the inner, surface and middle part of the body. Three hundred and sixty capillaries branch off from these, Separating further into seven hundred; the latter form a web of capillaries thought the body.



The aorta and the vena cava are the base of the entire vascular system of the arteries and of the veins, blood, and flesh. They are considered as channels of the same type because they both carry blood. From the trunk of the aorta and the vena cava branch off twenty-four great vessels that connect to the solid and hollow organs and to the head, and perform the function of feeding the seven bodily constituents.

Eight Hidden Blood Vessels

Among these, eight pairs are internal channels directly connected to the solid and hollow organs. The first three pairs branch off at the level of the third vertebra.¹

The first pair connects directly to the heart (as a branch on which the heart, like a fruit, grows); The second and the third pair go to the right and left lung; The fourth pair of vessels, at the level of the eighth vertebra, pierce through the diaphoretic volt to the left and goes directly to the liver; The fifth pair of vessels, at the level of the eleventh vertebra, reaches the spleen; The sixth pair of vessels, at the level of the thirteenth vertebra, connects to the reproductive organs; The seventh and eight pairs of vessels, at the level fourteenth vertebra, connect to the right and left kidney.

These eight pairs of great vessels are not evident on the surface of the body, and thus are called "eight great hidden vessels."

Sixteen Evident Blood Vessels

Sixteen are externally evident vessels that connect to the "external" parts of the body. The Words of the Elder describes them in the following way:

At a thumb's distance to the right and left of the Adam's apple, there are two arteries, the left and right external carotid. Anterior to these there are two arteries, the left and right internal carotid arteries. Still in the neck, there are the two right and left internal jugular veins. These vessels pass through the neck to the head. In addition, there are the eight great vessels of the limbs. Four of these branch off from the vena cava: the right and left subclavian veins in the arms and the right and left iliac veins in the legs. Four branch off from the aorta: the right and left subclavian arteries in the arms, and the right and left iliac arteries in the legs. To conclude, there are also the two spermatic² and ovarian arteries, a total of sixteen.

¹ See n.47

² The treatise The Eighteen Sections authored by Yuthok Yönten Gönpö, do not mention the spermatic and ovarian arteries, but speaks of eight vessels of the neck, namely the four arteries and the four veins of the neck (external jugular included).

From the twenty-four principal vessels branch off seventy-seven veins ideal for the therapy of bloodletting and one hundred and twelve vulnerable arteries. These will not be mentioned in this context.

The 19 Connecting Nerves

The white channel, which has the nature of its fluid components, has the size of an arrow of medium thickness. It originates in the brain and descends through the spinal cord in every vertebra gradually diminishing in size until it ends at the apex of the sacral bone. This channel, which is extremely ductile, is of primary importance because it is the source of the entire nervous system; for this reason it is called the "channel of life."

The Exegetical Treatise describes it as follows:

From the great ocean of the nerves of the brain, like roots, nineteen channels of the fluid components that perform multiple functions tapers downward.

Among these, those that connect to the solid and hollow organs, are the thirteen hidden channels (resembling) white silk strands, while six, the evident ones, connect to the four limbs. Sixteen minor channels of fluid components branch off from these six.

The brain, resembling a great lake, is the source of the entire nervous system. The most important channel of the nervous system is the spinal fluid that, like a root, tapers downwards within the spinal cord. Connected to this channel (or central nervous system), there are nineteen nerves of a considerable thickness that perform the function of producing and developing the structural elements of the nervous pathways (that have fluid and white components). A multitude of subtle nerves branch off from these nineteen to perform the following functions based on the life-sustaining wind: conveying the various sensations of pleasure or pain that follow the sense perception of objects; mediating the reflexive responses to sense stimuli; allowing bodily movements, and the articulation of words; sustaining the activities of the intellect (as mentioned in the context of the channels of existence).

The Thirteen Hidden Nerves

Thirteen of the nineteen principal nerves descend from the region of the cerebellum through the neck and connect to the solid and hollow organs.

They are differentiated on the basis of the nature — wind, bile, or phlegm— of the organs to which they are connected.

Four nerves connect to the heart and to the small intestine, and ensure the activity of the wind in these organs.

Four nerves connect to the lungs, large intestine, liver and gall bladder and are at the base of the functions of the bile (heat) in these organs.

Four nerves connect to the stomach, spleen, the kidneys and the bladder, and are at the base of the functions of the phlegm in these organs.

One nerve that in woman is connected to the ovaries and in man to the seminal vesicle ensures the activities of the three humors in these organs.

The Six Evident Nerves

The remaining six nerves are illustrated in Dr. Trabum's Commentary to the Difficult Points of the Four Treatises on Medicine ¹ in the following way:

[Among the six], two are the so-called tubular nerves that branch off from the brain at the occipital region. They extend and unite with the spinal channel at the level of the fifth verte-bra. In the lower part of the body each of these two nerves divides into two branches that enter the right and left legs. Two are the so-called the "nerves of paralysis"² that branch off from the brain at the right and left occipital region. At the level of the first vertebra, each of the two nerves branch into two channels and extend into the trunk and into the limbs. The last two channels, the so-called rena³ nerves extend from the region right below the ears and flow into the cheeks and into the arms.

Branches of the Six Evident Nerves

Tubular Nerves

Sixteen minor nerves branch off from the aforementioned six: four that extend into the lower limbs, originate from, and are of, the tubular type. Concerning these nerves, The Instructional Treatise states the following:

The two tubular nerves branch off from the [brain at]
fossa below the external occipital protuberance and flank

¹ A famous doctor and student of Situ Chökyi Jungné, the 8th incarnation of the Situ Trulku.

² These nerves are so-called because their injury may result in crippling of the limbs.

³ In various commentaries to The Four Treatises on Medicine the etymology of the term rena (rad na) is proudly related to the Sanskrit ratna that means jewel. Explaining the Tibetan word rena in this way is baseless. Most probably as suggested in Yuthok's treatise, The Eighteen Sections that the etymology of the word rena is related to the meaning of this word as spelled in Tibetan: falling of moist content of something minimal moist content.

the seventh cervical vertebrae at a thumb's distance to its right and left to join the spinal fluid at the fifth vertebrae. At the level of the twelfth vertebra, they connect to the reproductive organs and to the kidneys; they then proceed between the coccyx and the hip to the hip-socket and, hence through the "outer groove" of the thigh, the calf, the outer ankle joint and then converge in the third toe of the foot¹ Two other nerves branching off from the spinal [fluid] at the level of the fourteenth vertebra, proceed around the hip, through the anterior surface of the thigh, the anterior side of the knee, the anterior tibial region to converge at the big toe² and join thereafter with the aforementioned branch³ at the seamed bone.

Paralysis Nerves

Eight nerves originate from and are of the two paralysis-type nerves mentioned before. The Comment on the Difficult Points describes them in the following way:

The two nerves of paralysis issue from below the two sides of the fossa below the external occipital protuberance, at the level of the seventh cervical vertebra, they each divide into two branches.

Nerves of the Heel

One of these branches [joins the spinal cord] at the level of the vertebra situated behind the lungs and branch off at the fourteenth vertebra,⁴ where they then follow the contour of the hips, pass through the inside of the thigh, to emerge at the political fosse. Thence they proceed along the curve of the calf, emerging at the heel, whence they join up with the extremities of the tubular channels in the region of the seamed bone at the sole of the foot.

Nerves of the Trunk

The other branch penetrates in the region of the trapeziums muscle, between the shoulder and the neck, and then reaching the ribs, enters the posterior part of the trunk.⁵

¹ In this region these nerves possibly correspond to the perineal nerves.

² In this region the nerves possibly correspond to the deep perineal nerves.

³ In this area the nerves possibly correspond to the tibial nerves.

⁵ In this region the nerves possibly correspond to the spinal nerves.

Nerves of the Shoulder

Two other nerves [called "of the shoulder"] pass from the region of the shoulders through the deltoid region and biceps to the medial part of the elbow.¹

Nerves of the Elbow

Lastly, two nerves [called "of the elbow"] proceed from the armpit to the posterior part of the elbow joint and reach the palm of the hand, the thumb [and all other fingers].

Rena Nerves

Nerves of the Forearm

Two of the four nerves that originate and are of the rena type, [issue from the brain and,] after vanishing behind the collar bone, proceed into the armpit, and into the medial part of the arm, to emerge at the elbow where they follow the contour of the elbow joint. They then proceed through the dorsal part of the forearm to reach the back of the hand and the root of the ring finger [and other fingers].²

2) Nerves of the Head

The other two rena nerves extend into the mandibular region where they perform masticatory functions.³

¹ In this region the nerve possibly corresponds to the medial nerve.

² In this region the nerve possibly corresponds to the radial nerve.

³ The nerves here possibly correspond to the mandibular nerves.





4 The Channels or Basis of the Lifespan

In both the old and new commentaries to The Four Treatises on Medicine, the topic of the "channels of the lifespan" has been subject to arbitrary interpretations due to generalization and groundless deduction. Here, remaining faithful to the words of The Four Treatises on Medicine, we shall try to describe the channels of the lifespan, on the basis of Zurkharwa's explanations supplemented wit my analysis.

The Exegetical Treatise states as follows:

Three are the channels of the lifespan.
The first pervades the entire body, the
head etc. The second flows with the breath,
and the third wanders and thus resembles
the Lha.

Commenting on these verses, The Words of the Elder states the following:

The channels [of the lifespan] are so called because they serve as the support of such a principle even though they are not actual channels. [The words of The Exegetical Treatise] 'three are the channels of the lifespan' would have to be understood as an assertion that blood vessels and nerves correspond to the lifespan— but this is not tenable. We can say that the lifespan principle does not move within an actual physical channel, but along a course within the body.

Certainly the Words of the Elder takes "channels of the lifespan" to refer to the following three elements: the primordial awareness wind, ¹ the white and the red constituents or bodhicitta. Nonetheless, when Zurkhawa, its author, gives examples of the three "channels," he contradicts his previous statements by saying that the third principle of life, that which wanders, is the lha ² itself and that its channel is but the ulnar artery.

The Tibetan term *tshe* (in *tshe yi rtsa*, channels of the lifespan) means time or duration—in particular it refers to the lifespan, and the lifespan is defined as the duration of the vital principle. The basis that ensures the preservation of the vital principle are: the vital fluids or essence of the reproductive fluids,

¹ The primordial awareness' wind (ye shes kyi rlung) represents the pure aspect of the life-sustaining wind (srog 'dzin kyi rlung).

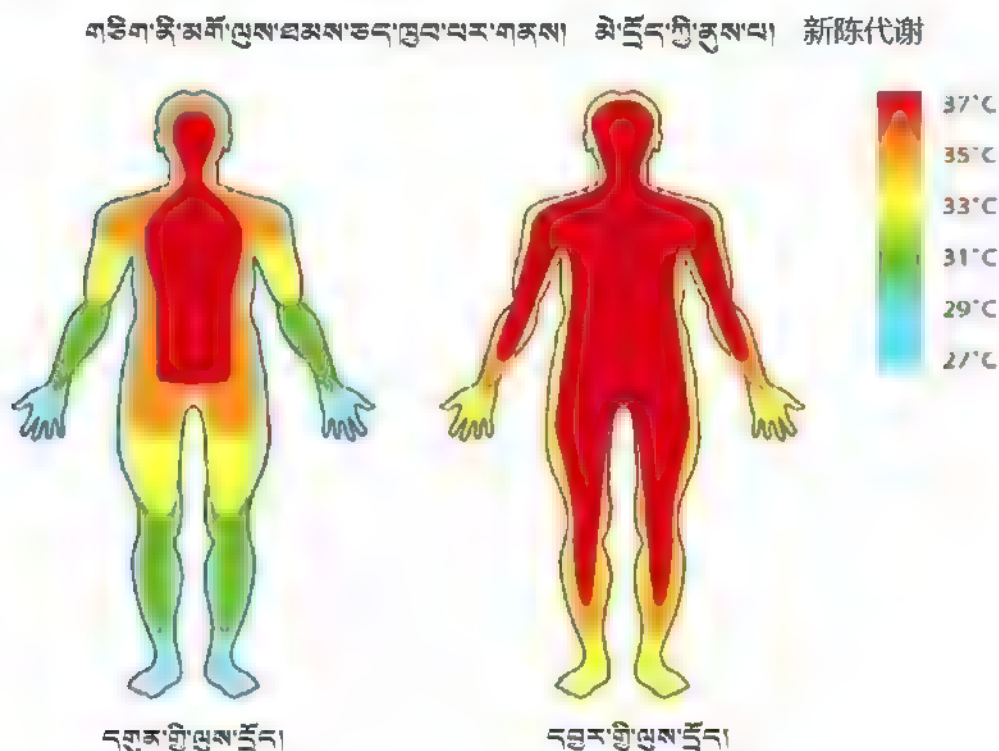
² See n.22

the flow of the breath and heat (i.e., the metabolic heat of the body). The life ceases when these "bases " exhaust their energy.

The Metabolic Heat: First basis of the lifespan

When The Exegetical Treatise states that "the first pervades the entire body, the head etc." It is heat or metabolic energy, following a definition given in the Treasury of Phenomenology (Abhidharmakosha) refers to "The heat that is the lifespan, and at the same time the support of the consciousness."

The heat (or metabolic energy) is the source of the physical strength as well as of the physical radiance. In one's oldage, the heat of the organism vanishes. The heat that relies mainly on the activity of the digestive system is, however, part of each bodily constituent. "Heat" is exemplified by the heat that present in the blood vessels, i.e., in the blood performs metabolic functions. This is the way in which the heat develops radiance and becomes a stabilizing factor for life.



The Pure Wind: the Second Basis of the Lifespan

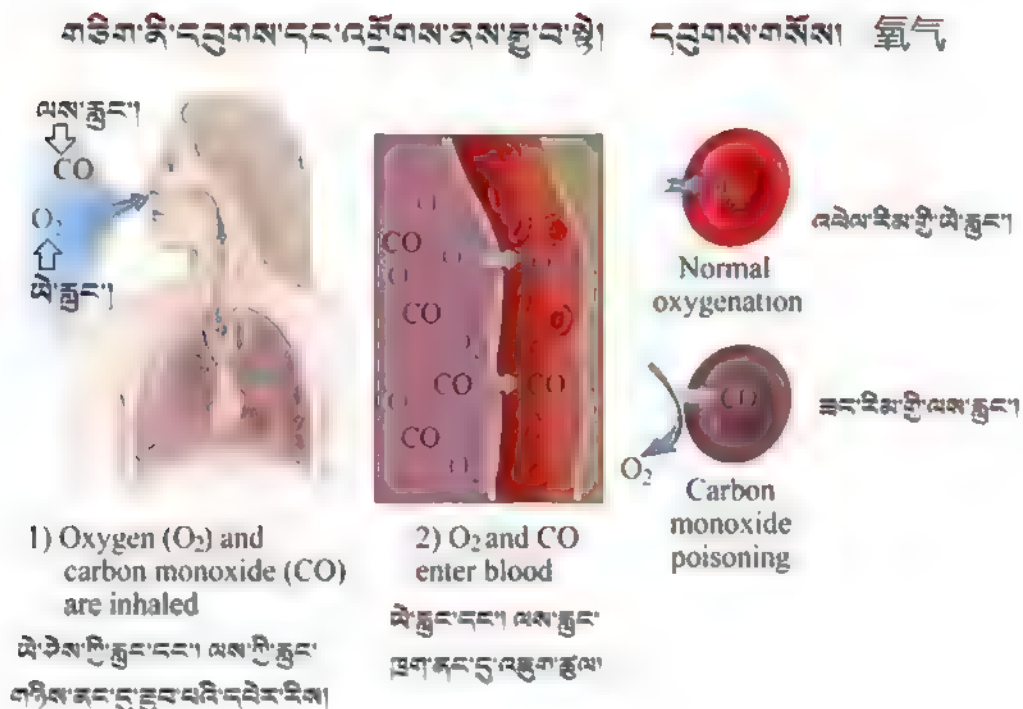
When The Exegetical Treatise states that "The second [basis of the lifespan] flows with the breath," it refers to the "primordial awareness wind," i.e., to the pure aspect of the wind that flows with the breath. The Words of the Elder describes as follows:

The "functional wind" is the wind that flows from the right and left channels (Roma and Jangma) through the nostrils. The wind of primordial awareness flows instead in the central channel. It has two aspects: one feeds the life-sustaining wind; the other flows mixed with the functional wind. In each day there are 21600 complete breaths, 10462.5 of which (from each nostril, in total, 20925) are functional wind, while in the remaining breaths (675) the primordial awareness wind is present.

Furthermore, the same text continues to state the following:

An increase in the number of breaths linked to the primordial awareness wind affects the lifespan and shortens it. When the primordial awareness wind flows 21600 times in a single day death will occur. For these reasons, applying the technique of breath control such as Kumbaka or holding the breath in a pot-like manner at the navel, one retains the primordial awareness wind in the body and thereby gains the power to live long.

In summary, since preserving the lifespan depends on the primordial awareness wind, (i.e., the pure aspect of the air that flows with the breath) in the channels, the primordial awareness wind is called channel of the lifespan principle.



The Vital Fluids: The Third Basis of the Lifespan

Concerning the third channel or course of the lifespan, The Exegetical Treatise states that the third basis of the lifespan "...wanders and thus resembles lha."

With this expression, The Treatise refers to the vital fluids or essence of the reproductive fluids that develops the strength and the radiance of the organism. These vital fluids are the so-called bodhicitta or potential for the full realization of the individual. They are the purest essence of the white constituent of the male and the red constituent of the female and of all the bodily constituents. The vital fluids (that flow respectively in the right and left channels) move throughout the body along the "points of the lha" according to a daily cycle. They preserve and provide the stability of the lifespan by circulating with the blood in the vessels and moving throughout other channels; for this reason they are called the "course or channel of the lifespan principle."

The cycle of the vital fluids is described in The Words of the Elder in the following way:

What moves in a cycle? The essence of the elements of the body (the vital fluids), and potential for the

complete realization of the individual (the bodhicitta).

What is the nature of that cycle? The essence moves along three phases of absorption, activity and potential.

The cycle begins on the first day of the lunar month when the essence is located at the tip of the big toe (of the left foot in the male and of the right foot in the female).

On the second day, the [residue of the] essence is absorbed at the big toe and at the same time performs its active function at the ankle while its potential shifts to the calf where it will be active on the third day.

Kongtrül Lodrö Tayé, in his Encyclopedia Indo-Tibetica explains the three phases of the essence in the following way:

Absorption take place when, after completing its function, the essence transforms into a residue or exhausted part. Activity takes place when the essence, principally the white constituent, is in the process of performing its active function. The essence has the potential to produce its successive moment, in its pure and impure form; thus it is a mixture of blood and wind, its formative aspect.

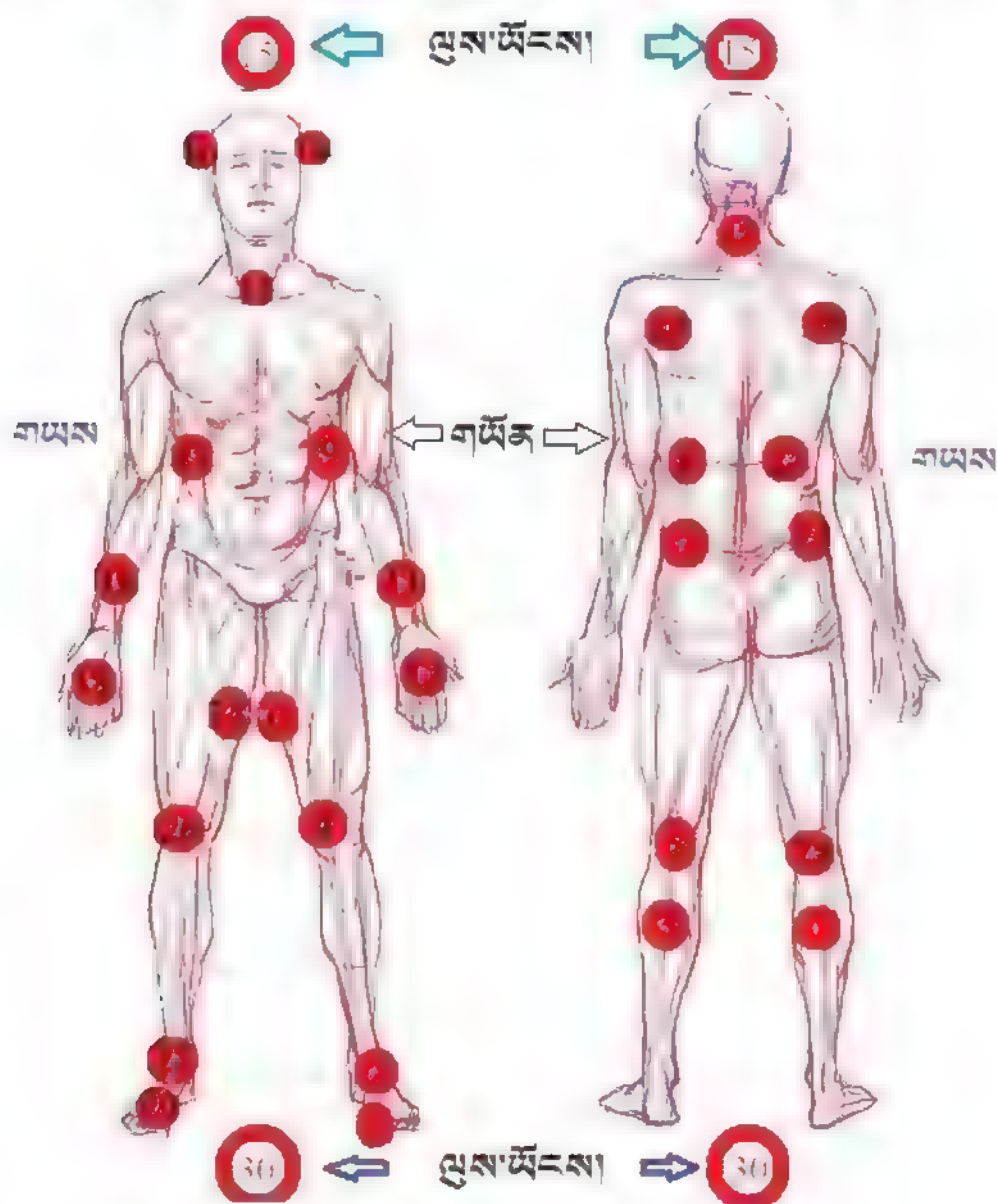
In the following table the points along which the vital fluids passes in its cycle are listed according to the astrological treatises.

Lunar Days	Points of the Lha	Lunar Days	Points of the Lha
1	big toe	16	temples
2	Ankle	17	Neck
3	Calf	18	palm of the hands
4	front of the knee	19	medial forearm
5	back of the knee	20	shoulders and upper arms
6	lateral side of the thigh	21	Ribs
7	Hips	22	region above the kidneys
8	region above the kidneys	23	Hips
9	Ribs	24	lateral side of the thigh
10	shoulders and upper arms	25	back of the knee
11	medial forearm	26	front of the knee
12	palms of the hands	27	calf
13	Neck	28	ankle
14	Temples	29	top of the foot
15	entire body	30	entire body

In addition, The Words of the Elder adds the following account:

The bodhicitta of the male [predominant in white constituent] flows in the left channel Jangma, Therefore, it begins its cycle from the left foot, while the bodhicitta of the woman [predominant in the red constituent] flows in the red channel Roma, and thus begins its cycle from the right foot. However, the white essence of the male and the red essence of the female flow in the same parts of the body.

In summary, the course or channels of the lifespan principle refer to the distribution and the course of the heat, primordial awareness wind and of vital fluids, in accordance with actual human physiology.

[illegible]

5 The Channels in the Meditation Practice

The Three Main Channels

The channels spoken of in the meditation practice are those described in the esoteric traditions (for instance in the "Six Yogas of Naropa").¹ They include the three main channels as well as the focal points where these branch off into smaller channels, called "chakra." The three main channels are the central channel,² the left channel (Jangma or lalana) and the right channel (Roma or rasana). The central channel (avadhuti) corresponds to the channel that in the Tibetan medical system is the support for the life-sustaining wind and that is present from the initial stage of the formation of the body in the womb. It stands in the middle of the four chakra, twelve and half fingers away from each other. The upper extremity of the central channel is virtually closed by the white constituent that has the shape of a upside down letter ham. The lower extremity (situated at three fingers below the navel region) is closed by the red constituent, which has the shape of the short letter a. Between the two extremities of the channel, which is empty like space, resides the "great life-sustaining wind" that is the support of the fundamental consciousness. Below the navel, the channel is called shankini and in it descends the white constituent.

The left channel, white in color, is situated to the left of the central channel, and tapers downwards. The right channel, red in color, is situated to the right of the central one. The upper extremities of these two channels enter into the nostrils. [Before reaching the nostrils] they bend at the crown of the head where they are known as the "crucial-channels of the brain." [In the tract which descends to the nostrils] they are called "the two channels of enjoyment's waves." Like chains, they flow along the four chakras. They pass parallel to the armpits and breasts. (For this reason, by pressing the armpits and breast the wind is made to circulate). Above the kidneys they begin to converge towards the central channel and below the navel, coming close to inserting themselves into it. (For this reason, by assuming the right posture, the two channels squeeze into the central one.) Their extremities end there, but the right channel connects to another channel "meme" that carries the solar element. The left

¹ The six yoga taught by the Indian tantric adept Naropa comprises the inner heat (gtum mo), the illusory body (sgyu lus), dream (rmi lam), clear light (od gsal), transference of consciousness ('pho ba) and the intermediate state (bar do).

² The central channel is known as avadhuti (kun 'dar ma) that literally means 'quiver' because it thrills with the experience of great pleasure (N.d.t.).

channel connects to the channel "nyime" that carries musk [i.e., semen]. The left channels in both the male and female have a protrusion which discharges urine. The protrusion of the right channel in women discharges the reproductive fluid (when it has reached its fullest), and blood once a month. In the male, the [lower wend of the] right channel is curved. Because of this, when the body is imbalanced, blood is released from the right nostril. (Violent activities etc., cause the channel to open and blood is lost with the urine). The wend of the central channel in men emits semen when the semen reaches its fullest. In women the wend of the central channel are of four types: 1) subtle and coiled, like a conch shell; 2) closed, like a musk deer gland; 3) hanging, like an elephant's trunk; and 4) opening and closing, like a lotus.

Scholars identify and describe the central channel in different ways. Some attribute a double aspect to the central channel, an imaginary and a concrete one. They believe that this last one dissolves at the moment of death. Some scholars correlate it directly with the channel of the spinal fluid, while others assert that the central channel is a horsehair-sized channel that goes through the spinal cord from top to bottom. Lastly, some deny that the central channel has any concrete existence. To this last assertion one may object by arguing if the central channel does not have physical basis in the body, to meditate on it would yield no result, as there is no result that is not born out of a cause. Zurkharwa, the author of the Words of the Elder identifies the vena cava with the right channel (rasana) and the channel of the spinal fluid with the left channel (lalana) and furnishes the following explanation:

In the left channel (lalana) flows principally the white constituent and, in the right channel (roma) mainly the red constituent; for this reason, the vital channels are classifiable into: channel of the spinal fluid or white vital channel and vena cava or dark channel. The vena cava is the trunk of the entire vascular system, whose twenty-four major branches or vessels have the function of nourishing blood and tissue.

Concerning the left channel, Zurkharwa asserts the following:

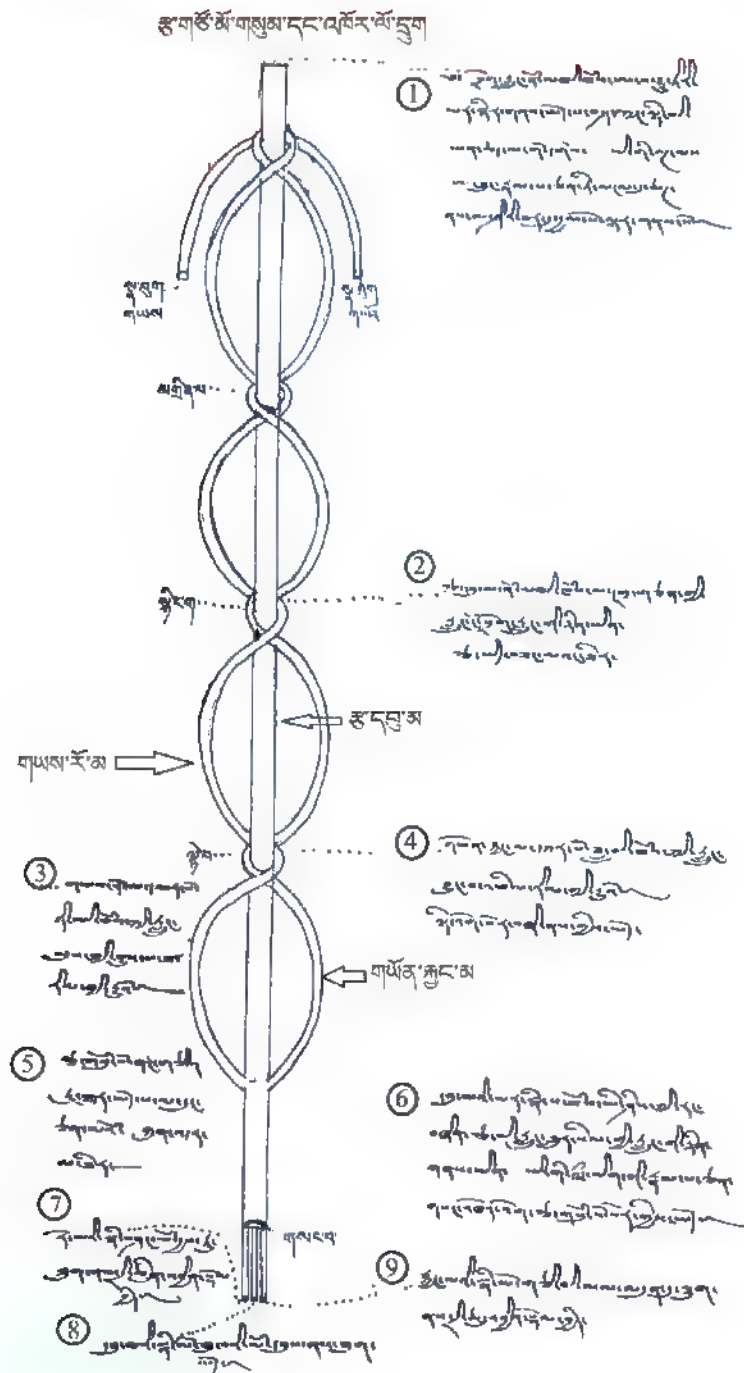
The brain which arises from the upper extremity of the left channel, like a great ocean, is the source of the entire nervous system. From the brain, like a stem, descends the channel of the fluid of the spinal cord, the principal vital nerve.

In summary, the left channel corresponds to the channel of the spinal cord fluid or "white nerve of the fluids;" the right channel corresponds to the vena cava (or vital non-pulsating dark vessel), and the central channel, where the primordial awareness wind flows (i.e., the pure component of the air connected to the breath) is implicitly to be understood as the aorta or "red vessel of the wind."

Unlike the treatises on medicine, the esoteric traditions do not identify clearly these channels in the body. They refer to them in "twilight language" as follows:

The channel of rahu stands in the center,
The extremities of sun at the right,
The moon's extremity at the left.
In them circulate the fluids, fire and space.

In tantric literature, such topics are reputed to be of great importance, thus, to avoid their entrance into the public domain and reaching those who are not fit receptacles, they are discussed with language that is intentionally difficult to understand. In the meditative practice the three main channels are visualized in the following manner: first one imagines that the body is internally completely empty; then one visualizes the central channel straight like an arrow, paralleled to the right and the left by the rasana and lalana. This visualization serves exclusively as a support for meditation and is compatible with the corresponding medical description of these channels.



The Chakras

Let us now examine the four "chakra" or focal points where channels branch off. At the navel the "chakra of emanation" is situated, from which sixty-four channels branch off. At the level of the heart the "chakra of phenomena" is situated, with eight channels. At the level of the throat the "chakra of experience" is situated, from which branch off sixteen channels. At the top of the head the "chakra of great pleasure" is situated with thirty-two channels.

Concerning the semantics of the names of the chakras, generally speaking, the chakra "of emanation" is so-called because the navel performs a primary function in the initial development of the body. The chakra "of phenomena" is so-called because it is the basis of the manifestation of all phenomena that have the nature of the mind.¹ The throat chakra takes its name from its function: the experience of the six food tastes. Lastly, the "charka of great pleasure" is so-called because it is pervaded by the white essence that gives pleasure.

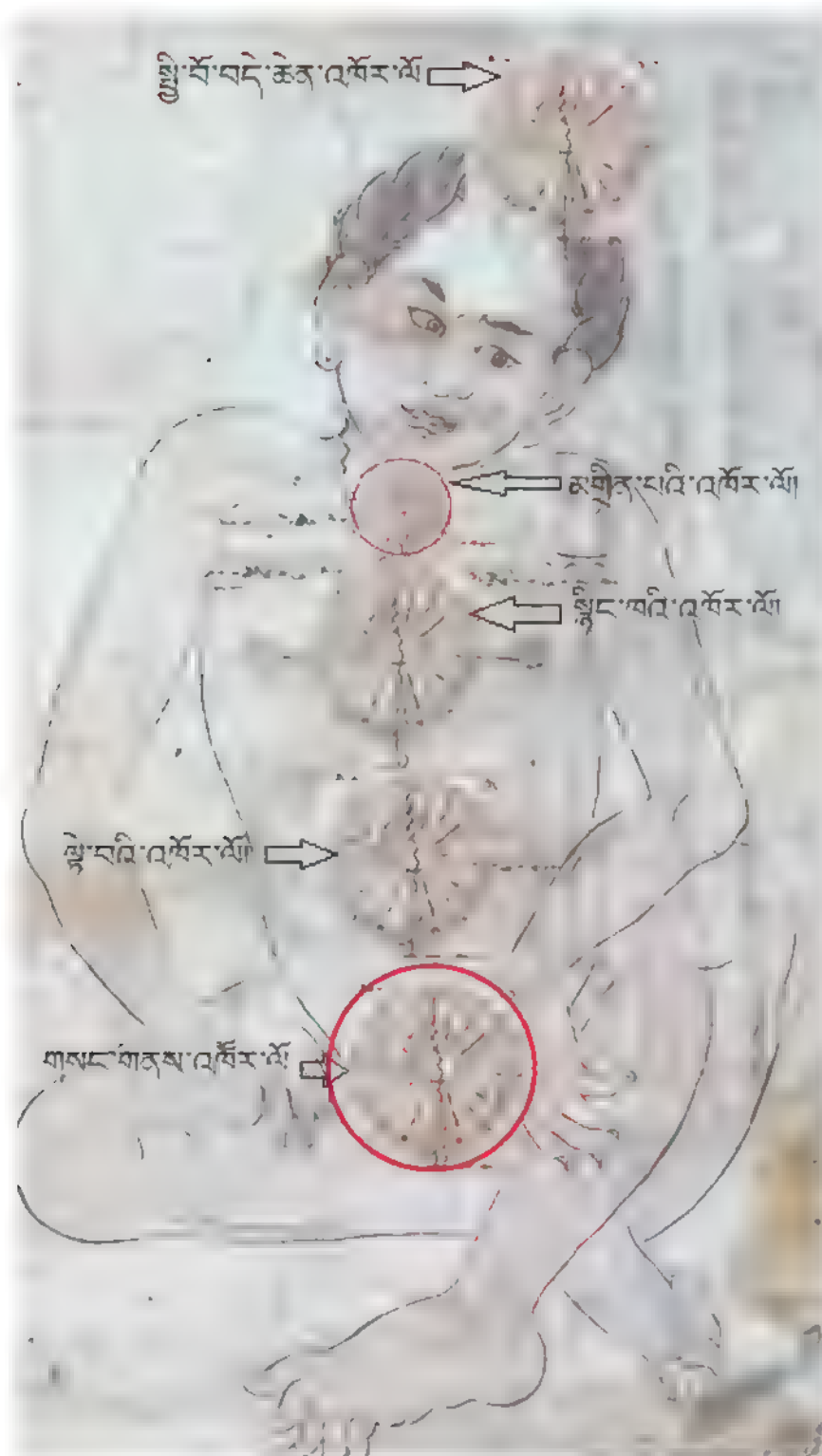
At times, adding the chakra of the genitals whose function is that of sustaining pleasure, five chakras are enumerated. These four focal points in fact correspond to the four great channels of existence described in The Exegetical Treatise. However, in the context of the meditative practice they can be visualized in many different ways and their number may vary.

Concerning their semantic, the focal points are known as chakras or wheel not simply because of their shape but also in terms of their capacity and function. Accordingly The Encyclopedia of Indo-Tibetan Knowledge states as follows:

Chakras [lit. wheels], which are so called because of the configuration of their "petals" [channels], suggest the shape of a wheel; but also because [like a wheel that crushes what is in its path] by binding and exercising pressure on these vital points, the deceptions of the four states are eliminated.²

¹ Though it is not possible to locate the mind of a person in a particular part of his or her body, in the tantric tradition it is by preference associated with the region of the heart, where it dwells in its subtle form inseparable from the white and red constituents. Because all phenomena arise on the basis of this subtle mind, the chakra located in that region of the heart is known as wheel of phenomena." Trans.

² The four states (gnas bskabs bzhi): sleeping, dreaming, wakeful and orgasmic.



The Channels of the Provocations

The Hidden Explanation of the Adamantine Body composed by the Drupa Kagyu ('Brug pa bka' brgyud) master, Gyelwa Yanggon Pa Gyaltsen Pelzang (Rgyal ba Yang dgon pa Rgyal mtshan dpal bzang) mentions various channels linked to provocations as follows: ¹

They include the channels of the tsen connected to the lungs; the channels of the gyalpo connected to the heart; the channels of the mamu connected to the kidneys and to the liver; the channels of the therang connected to the stomach; the channels of the naga connected to the small intestine. When these channels are so to say opened by improper conduct or by deceptive thoughts, this allows the intrusion of specific provocation. The extremities and critical points of these channels is situated at the root of the ring finger; for this reason in Tibet, to protect themselves from provocations people follow the custom of wearing rings on this finger. The other extremity of these channels is situated in the third toe of the foot, but it is of minor importance.

The Channels of Distress

The Hidden Explanation of the Adamantine Body states the following:

The same text mentions the so-called "channels of distress." The principal one of these is located in the big toe and on the top of the foot. It may happen that during sleep this channel is disturbed by contortions caused by posture, and the symptom called "the provocation of immobility" is experienced. The symptom manifests as a momentary paralysis of the entire body accompanied by the sensation that an invisible being is causing this immobility. The extremity of this channel is in the big toe, while its extension reaches the back of the knee where it is called "channel of weakness." The immobility or collapsing of

¹ The term "provocation" translates the Tibetan term *gdon* (literally spirit), and refers to eight classes of non-human (*sde brgyad*), some of whom are mentioned in this paragraph of the text. In the context of medicine, provocations refer to any sudden disease that may be caused by external agents such as pollution. In certain cases the different classes of spirits serve as the remote cause of such disease.

the knee that may occur as one experiences fear or panic are caused by this channel.

The channel connects to another one called "dark grove" (nagtselma) and the resulting channel proceeds laterally to the kidneys and it is named the "stimuli channel." The eyes are the critical point of the 'stimuli channel' where it is known as "spiral channel" and it produces tears. The activation of these last channels, manifests as physical and emotional expressions like itching or sexual excitement and produces various phenomena such as salivation, the lachry-mator and perspiration.

The "stimuli channel" joins with another one called "accomplished" (Drubma) that flows medially to the kidneys to the throat. At the throat the quivering of this channel produces hiccups. From the channel called "nocturnal" (Tsenmoma) branches off a channel that connects to the lungs and the heart.

When this channel is stimulated by contact [with other channels] it causes sneezing as well as flashes of mental clarity.

The Six Undesirable Channels

The Hidden Explanation of the Adamantine Body states the following:

The same text mentions six "undesirable channels:" "lying" (nyalma), "crippled" (zharma), "soaked" (bongma), " pit" (dongma), "crossed" (dzinma), "crooked" (chuma). Their presence in the body is not to be desired. Effects: the

channel "lying" determines physical traits such as short stature and an unshapely body, and during the practice of meditation it causes the sensation of lying prone. The channel "crippled" causes loss of weight and during the practice of meditation it gives the sensation of being enclosed between rocks. The channel "short" dissolves any essence, white or red, that enters into it, causing sterility; the injury this channel causes to the vital fluids hinders their development through meditative practices. The channel 'pit', where the [white and red] constituents cannot flow, creates hermaphrodites or impotency and, in the meditative practice will prevent the development of the sensation of pleasure.

The channel "crossed" causes illnesses and spoils physical beauty, and in the meditative practice, causes pain related to malfunction of the winds and channels. The channel " crooked" makes the body curve and, in the meditative

practice, is the source of obstacles that hinder the attainment of inner qualities. The presence of these channels in the body makes one an unfit candidate for the tantric practice [involving channels and winds].

Male, Female and Neuter Channels

The Hidden Explanation of the Adamantine Body gives the following account:

Lastly there are male, female and neuter channels. The male channels are constricted, knotty, and emerge on the surface of the body. Their presence foretells that physical and meditative impediments will equal their virtue.

The female channels are linear and without knots. Their presence foretells many virtues and fewer physical and meditative imperfections.

The neuter channels are uniform. Their presence foretells that one will have few imperfections but also few physical and meditative virtues.

These and other channels mentioned in the tantric literature must certainly be evaluated and studied by those who aspire to practice medicine.

Chapter VII Wind and Vital Fluids

1 Wind :

The term wind (rlung) refers to the mobile energy indispensable for the life or the organism. Wind presides over the functions of breathing, movement, physical effort, maturation and flow of bodily elements, and enables the senses to perceive objects. In addition, the wind, having become super-functional by virtue of the technique of breath control, can induce extraordinary experiences and capacities peculiar to the meditative practices of contemplative practitioners. These experiences and capacities include, for instance, an intense sensation of heat accompanied by an equally intense pleasure that pervades the entire body.

Here there is no need to describe different classifications and functions of wind as illustrated in the Tibetan medical treatises. We will instead take into consideration the treatment of the wind element in the context of the esoteric tradition.

Five Principal Winds

In *The Lamp on the Practice of the Six Yogas* by Gyaltsab Peljör Döndrub Rgyal tshab Dpal 'byor don grub, we read the following:¹

Among the five principal types of wind, the life-sustaining wind is located in the central channel between the letters a and ham found respectively at the lower and upper extremities.

The life-sustaining wind, which is also called 'the subjective mind of emotionality,² and the consciousness that is the foundation of all, are mutually dependent on each other.

In the course of life, a part of this wind flows with the breath associated with the twelve periods of the day (each comprising two hours), until the moment of death when this wind flows for an entire day. Its function is of producing thoughts and the sense of self.

¹ rGyal tshab dpal 'byor don grub, one of the incarnations of the Gyaltsab Rinpoches

² The subjective mind of emotionality (nyong yid) represents the illusory idea of the self. Here it is defined as life-sustaining wind because it determines the conditioned life of the person and of the associated emotionality.

When this wind invades locations that are not its own, it causes seizure, insanity, or death. "The life-sustaining wind" is mingled with the "primordial awareness wind" that has the nature of non-conceptual clarity. Colorless like space, it is the wind of the space element.

"The descending purgative wind" is located at the juncture of the three channels [situated three fingers below the navel]; its function is that of expelling or holding feces, urine, sperm [and blood]. When this wind invades locations that are not its own, it becomes the cause of various illnesses in the lower part of the body. It is the wind of the earth element.

"The ascending wind" originates in the channel called "chariot" that is situated in the region in front of the central channel. At the throat, this wind allows the articulation of words. When the ascending wind invades locations that are not its own, it causes the majority of illnesses that develop in the upper part of the trunk. It is the wind of the air element.

"The fire-accompanying wind" originates in the channel called "elephant's trunk" that is situated in the southeast of the central channel. In the digestive tract this wind performs the function of differentiating the nutrients from the residue of ingested foods. When the fire-accompanying wind invades locations that are not its own, it causes swellings of the belly, flatulence, barbarisms and other problems of the digestive system. It is the wind of the fire element. "The pervasive wind" originates in the channel "pale yellow" (pingala) which is located in the south of the central channel, then enters the right channel and in this way pervades all parts of the body. When this wind invades locations that are not its own, it causes paralysis-seizure-type diseases. It is the wind of the water element.

Five secondary winds

The tantric literature speaks of five types of secondary winds.

1) The wind called naga originates in the channel "victor" (gyel) that is located in the southwest of the central channel. In the optic nerve it performs the function of recognizing visual forms, and producing a playful air of grace of the person. It is the wind of the space element.

2) The wind called "turtle" originates in the channel "victory" (gyelwa) that is located to the back of the central channel. (In the vestibulocochlear nerve,) it serves as the basis for audile perception and of contraction and extensions of the limbs. It is the wind of the air element.

3) The wind called "chameleon" originates in the channel "drooping" (Kuntujangwa) that is located in the northwest of the central channel close to

the right side. (In the olfactory nerve,) it serves as the basis for the perception of smell. It causes flatulence and intestinal rumbling; it is the wind of the fire element.

4) The wind called "God's gift" (devadatta) originates in the channel "powerful" (wangpo) that is located to the left of the central channel. (In the glossopharyngeal nerve,) it performs the function of recognizing taste and in the region of the throat causes yawning. It is the wind of the water element.

5) The wind called "victor through wealth" (dananjaya) originates in the channel "contrived" (tsulcho) that is located the northeast of the central channel. It serves as the basis of somatic sensibility and tactile sensations; after death it remains active for a day within the body. It is the wind of the earth element.

These ten types of wind develop successively from the moment of conception throughout the period of gestation for ten months. From the moment of conception the origin of all the winds is the life-sustaining wind, present with the aspect of the letter "a."

Gradually (one after another) starting with the descending wind, in the second prenatal month, all the winds develop. The life sustaining wind is located in the central channel as the dominant factor for the increase and decrease of all the winds. Once it has developed, the life sustaining wind and its by-winds pervade all the body performing all its functions. After ten months, along a 100 year lifespan, they gradually reabsorb.

The *Wind's* Flow

The Encyclopedia Indo-Tibetica describes the flow of the breath through the nostrils in the following way:

The wind comes from the navel chakra and rises in the right and left channels to be exhaled through the nostrils. The wind that flows through the right nostril is solar wind, and since it follows the order of dissolution of the elements it is known as "toxic wind."¹ It is characterized mainly by method rather

than wisdom and its dimension or kaya is that of the primordial condition of speech or energy. The solar wind flows through the right nostril for

¹ According to the ancient Indo-Tibetan cosmology, the initial formation of the world begins with the space element, then continues with air, fire, water, and finally the earth element. After its period of abiding, the world enters the phase of disintegration when the elements dissolve in the opposite order. The solar wind that, in cycles, flows through the right nostril, follows the order of dissolution of the elements; the wind of the earth, water, fire, air and space. The lunar energy follows the order of development of the elements starting from the space element.

10462.5 daily inhalations and exhalations. The wind that flows through the left nostril is lunar air, and since it follows the order of increase of the elements, it is called "ambrosia wind." It is characterized by wisdom, and its dimension is that of the primordial condition of the body. The lunar wind too flows for 10462.5 daily breaths.

In the center of both nostrils, the primordial awareness wind flows for 675 daily breaths. Since it possesses the strength of the planet rahu, it is known as "element of rahu." It is the wind of the space element because, like the sky, it creates openness. Its nature is the indivisibility of method and wisdom,¹ and its dimension is that of the primordial condition of the mind.

Each day, from the nostrils flow 360 breaths for each of the winds of the five elements: earth, water, fire, air and space. The period that comprises 360 breaths is a minor cycle. Five minor cycles constitute a major cycle (equivalent to two hours) inclusive of 1,800 breaths. In a day there occur 12 major cycles, i.e., 21,600 respiratory acts, of which 675 are associated with the primordial awareness wind. In each of the twelve periods of the day, this wind flows 56.25 times, while in each of the minor cycles it flows 11.25 times. The primordial awareness wind thus constitutes a 32nd part of a breath.

In terms of seconds, minutes, and hours, 15 breaths (each lasting four seconds) occur in a minute, 900 breaths in an hour, and 21,600 breaths in 24 hours, inclusive of inhalation and exhalation. Of these, 675 breaths are associated with the primordial awareness wind, thus, we can calculate that this wind flows 28.25 times in each hour. In the course of the thirty days of the lunar months, the breath associated with the primordial awareness wind flows for 22 hours and 30 minutes. This means that in the course of the 360 days of the year the breaths associated with this wind cover a period of 11 days and 40 minutes.

In the course of a life that lasts 100 years, the breath flows 777, 600,000 times, among which 24,300,000 breaths belong to the primordial awareness wind. This wind flows for a total of 1,125 days, i.e., for three years, one month and fifteen days.

In Tibet, where the year is calculated according to the lunar day (that is briefer than the solar one), we come to a total of three years, two months and a little more than two days; but, a general expression speaks of three years and three months (the lunar phase of the next month, i.e., the third month is already taking place).

¹ Method (thabs) and wisdom (shes rab) represent the two wings of the way of self realization. In the tantra, the first is identified with the experience of pleasure and, the second with the understanding of emptiness. These two are an inseparable unity that constitutes the very nature of each and every individual's mind.



ཉིན་མག་གཅིག་ལ་འཕོ་བ་བཀྲ་གནི་མཐོན་ཅིང་འཕོ་བ་རེ་ལ་རྒྱང་ཟད་རིམ་དང་། འཕོ་བ་རེ་ལ་འཕེལ་རིམ་རྒྱ་རིམ་བྱེད་ཅིང་མོད་བ་རེད།			ལྷག་འཕྱིག་མེད་གོ་བྱེད་། གཞུ་བུ་མ་བ་བཅས་འཕོ་བ་བྱུག་པོ་རེ་རེ་ལའང་འབྱུང་བ་ལྟེ་རྒྱང་ཆེ་ཆད་རེ་རྒྱལ།		
མཉམ་པའི་	ས་རྒྱང་ ༩༦༠	ཁྱིམ་རེའི་འབྱུང་ལྟེ་	ཁྱིམ་རེའི་འབྱུང་ལྟེ་	མཉམ་པ་རྒྱང་ ༩༦༠	སི་མཉམ་པའི་
ཁྱིམ་དྲུག་རྒྱ་	རྒྱ་རྒྱང་ ༩༦༠	རྒྱང་བཞུགས་པས་	རྒྱང་བཞུགས་པས་	རྒྱང་རྒྱང་ ༩༦༠	ཁྱིམ་དྲུག་རྒྱ་
འབྱུང་བ་ཟད་	མེ་རྒྱང་ ༩༦༠	1,800དང་། ཁྱིམ་	1,800དང་། ཁྱིམ་	མེ་རྒྱང་ ༩༦༠	འབྱུང་བ་
རིམ་རྒྱ་རྒྱ་	རྒྱང་རྒྱང་ ༩༦༠	དྲུག་གི་རྒྱང་བཞུགས་	དྲུག་གི་རྒྱང་བཞུགས་	རྒྱ་རྒྱང་ ༩༦༠	འཕེལ་རིམ་རྒྱ་
བ།	མཉམ་པ་རྒྱང་ ༩༦༠	པས་ 10,800རྒྱ་	པས་ 10,800རྒྱ་	ས་རྒྱང་ ༩༦༠	རྒྱང་རྒྱ་བ།

In his Encyclopedia Indo-Tibetica, Kongtrül states as follows:

When half of the primordial awareness wind has been dispersed outside with the breath, signs of death manifest.

The yogin, holding the wind inside his body using the appropriate techniques, realizes the indestructible

dimension of immortality. As mentioned before, the breaths of primordial awareness wind that take place in the course of a 100 year long life, last for a total of three years and three months. If during the period of three years, the yogin succeeds in banishing the karmic winds and in activating the wind of primordial awareness,¹ he will obtain full realization. For this reason the statement that "the condition of the vajra holder (vajradhara) is realized in three years and in three months," is made.

Wind interacts with consciousness and helps consciousness to perform its function of experiencing sensations, as clearly stated by the Eighth Karmapa Mikyö Dörjé (Ka rma pa Mi skyod rdo rje) in his treatise *The Indivisibility of Wind and Mind* and as we read the following account in the *Guhyasamāja Tantra* :

Though they exhibit distinct characteristics, wind and consciousness perform the same functions. Awareness and clarity characterize consciousness; movement, deception, matter and wind. To explain the two by means of an example, the consciousness resembles a lame man with excellent eye sight; Wind is like a blind horse; together, they travel in the four directions. Similarly, the consciousness, driven by wind, flashes through the door of the senses toward the objects. With consciousness as the primary cause and wind as the secondary condition, all activities of the life cycle take place. Separated from each other, the lame man and the horse cannot travel; likewise, by virtue of experiential techniques, the wind is held in the central channel and, like a horseman without his mount, the consciousness deprived of the wind's [stimuli] stops, and becomes pliable. Like a blind horse without a rider, the activating wind, without the mind, cannot move and is thereby self-liberated. In that moment reality is spontaneously recognized and, with the wind and consciousness self-purified, there is enlightenment. Therefore cherish in your heart the techniques of breath control.

2 The Vital Fluids

The vital fluids (thig le) belong to the triad of channels, winds and vital fluids. We may say that the vital fluids here are the pure distillate of the white

¹ The primordial awareness wind (ye shes rlung) flows in the central channel. Its nature is pure in that it is the mobile aspect of primordial awareness itself. The functional wind (las rlung) or conditioned or karmic wind is impure and associated with deception and disturbing emotions.

and red constituents, which form the procreative fluids, the last of the seven bodily constituents.

The Exegetical Treatise defines thiglé as follows:

The supreme vitality of the procreative fluids is the end-result of the constituents. It is predominant at the heart region but at the same time it produces the radiance and the luster of the whole person.

The esoteric tradition speaks in general of three types of thiglé: a) The fundamental thiglé represented by the freedom from dualistic thought. b) The deceptive thiglé represented by unawareness. c) The thiglé that serves as an antidote to unawareness.

These three types of thiglé are classified on the basis of different functions and potentialities expressed by the vital fluids or pure essence of the white and red constituents. The Lamp of the Practice of the Six Yogas states that "the fundamental thiglé is the primordial awareness, the very nature of the mind. It is present as the thiglé of the life-sustaining [wind]." Such thiglé is the ground for the purification effected by tantric techniques. The same text explains that the second type of thiglé results from:

The lack of recognition of the fundamental thiglé leads to a dualistic vision—the illusory manifestation of subject and object. The manifestation of such dualistic vision represents the deceptive thigle related to unawareness.

This thiglé which originates as a result of the mind's lack of recognition of its own nature is classified into three aspects: a) the white and red quintessence of the reproductive fluids; b) the residue of the bodily constituents and; c) the thirty-six bodily constituents. The first of these is the element to be purified by tantric techniques.

The white and red constituents act as support for the consciousness and the life-sustaining wind. The white constituent dwells at the upper extremity of the central channel in the nature of the letter ham; while the red constituent resides in the nature of the short letter a , below the navel, in the region where the three principal channels meet. In the space delimited by the two constituents, the fundamental consciousness dwells, and the life-sustaining wind flows. At the time of death, the white constituent descends and the red

constituent ascends dispersing the life-sustaining wind and causing the transmigration of the consciousness.

The third type of thiglé, which serves as an antidote to unawareness, is represented by the methods that, with the application of the technique for holding the breath etc., gradually purify the impurities of the mind (i.e., the disturbing emotions), and transforms the mind itself into the enlightened mind. At the same time these methods also purify the thirty-six bodily constituents, which are physical impurities and transform the body into a rainbow body. One should learn the details concerning this purification process from the Six Yoga of Naropa and other tantric systems.

However, a technique of primary importance among these methods is that of the "inner heat." The activation of the inner heat causes the descent in the channels of the white constituent, through which the experience of pleasure permeated by the understanding of emptiness is produced and developed. The technique is concisely described by the following words from the Guhyasamaja Tantra as follows:

From the "source of phenomena" situated four fingers below the navel, the inner fire in the shape of a needle bursts upward its radiant heat, reaching and melting the upside down letter ham in its luminous aspect. The bodhicitta¹ of the sixteen thigle descend, producing the experience of great delight. At the center of the brain, the thiglé produces delight; eight [thiglé], half of the thiglé, descend to the throat where they produce the supreme delight; four [thigle], half of these thiglé, descend to the heart where they give rise to the [experience of] pleasure and emptiness free of [the concept] of joy; two [thiglé], half of these thiglé, descend to the navel where they produce a delight equal to the absence of body. This is the highest delight, the indivisibility of pleasure and emptiness. A delight associated with the innate primordial awareness whose experience cannot be described with words. To maintain this experience once, one has recognized it, leading to the immutable realization of the indivisibility of pleasure and emptiness.

¹ The bodhicitta that in Mahayana Buddhism represents the altruistic motivation to attain enlightenment, in the tantric context, without losing its connotation, is identified with the thiglé or quintessence and in particular with the semen. The semen represents the potential for enlightenment in the sense that the control and non-emission of the semen serves as the condition for the realization of an ecstatic primordial awareness, that is the very mind of the enlightened beings.

In the body, the thigl  or vital fluids, essence of the white and red constituents, move according to the daily and monthly cycles of the sun, the moon and to those of the other celestial bodies. In The Secret Explanation of the Adamantine Body, Drupa Kagyu master Gyaltsen Pelsang states the following:

The vital fluids move according to a daily cycle of increase and decrease, a monthly cycle of increase and decrease, a yearly cycle of increase and decrease and a cycle of increase and decrease that occurs in the course of an entire life.

The Vital *Fluid's* Cycle in the Solar Day

1) From 7 a.m. to 9 a.m., with the rising of the solar energy and in concomitance with the sunrise, the power of the red thigl  increases. In this period, in concomitance with the increase of the outer temperature, the strength of the fire and wind element increases, the [digestive] heat is activated and foods are promptly digested.

2) From 9 a.m. to 11 a.m., the red thigl  symbolized by solar energy reaches the navel and creates desire. In synchronicity with external conditions, people adopt behaviors influenced by desire such as singing, dancing and laughing, etc. Pleasure is the sensation that predominates in this period.

3) From 11 a.m. to 1 p.m., when the sun is at its zenith, the red thigl  reaches the heart region and consequently the mind feels heavy. (For this reason the ancient ascetics would guard themselves from sleep in this part of the day). Sleepiness and fogginess are the predominant sensations of this period.

4) From 1 p.m. to 3 p.m., the red thigl  reaches the throat and the person experiences sadness and unhappiness. Aggressive behavior manifests (quarrels take place in this period). Because the genitals are deprived of the red thigl , the heat in the lower part of the body decreases while it increases in the upper part of the body, neutralizing the power of the white thigl .

5) From 3 p.m. to 5 p.m. the red thigl  reaches the top of the head and the body loses its optimal heat. It becomes difficult to digest foods and the potency of the fire-accompanying wind decreases.

6) From 5 p.m. to 7 p.m. the heat of the red thigl  on the top of the head melts the white thigl .

7) From 7 p.m. to 9 p.m., when the moon and stars shine in the sky, the sixteen parts of the white thiglé descend to the throat. Sixteen of them feed the bodily constituents. In correspondence with the gathering of women and men of knowledge in the outer places, the vital fluids vibrate and collect in the channels of the body.¹ This period predisposes one to outer provocations.

8) from 9 p.m. to 11 p.m. the vital fluids situated in other parts of the body weaken, therefore, one experiences fear. Eight parts of the white thiglé descend into the channels of the heart. Eight of them feed the bodily constituents.

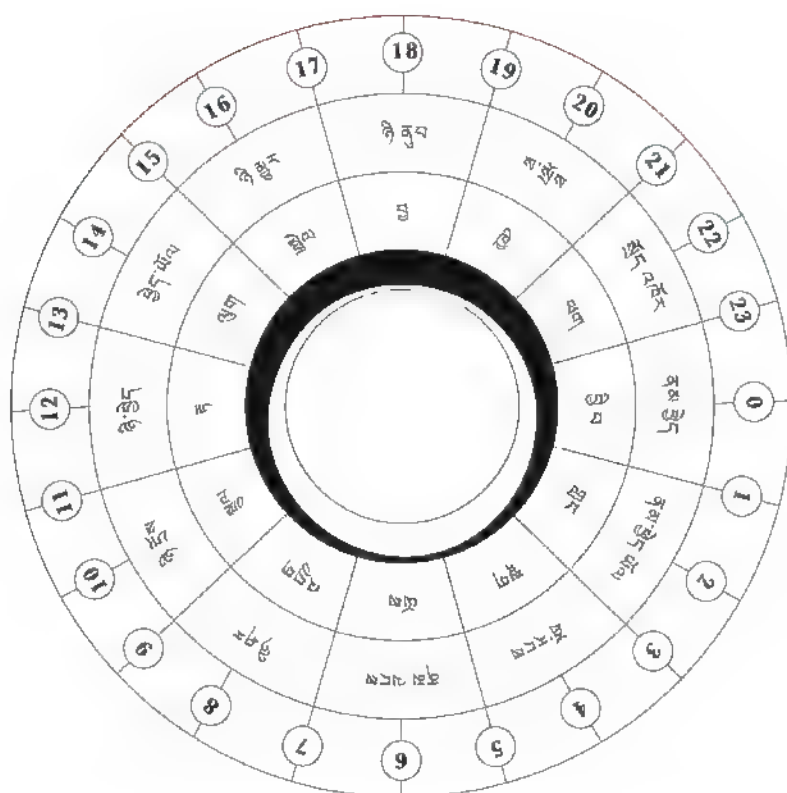
9) From 11 p.m. to 1 a.m., at the period when the full moon, in its fifteenth waxing day, reaches its zenith, the person enters a state of deep sleep.

10) From 1 a.m. to 3 a.m., the four parts of the white thiglé feed the bodily constituents and four descend to the navel.

11) From 3 a.m. to 5 a.m., the experience of tactile sensation becomes predominant. Two parts of the white thiglé feed the bodily constituents while two descend to the genital region. The resulting invigoration of the sexual organs is propitious for the highly developed tantric adepts; for ordinary people this is only an occasion for ordinary sexual intercourse.

12) From 5 a.m. to 7 a.m., that two part of white thiglé, acquire the potency of the red thiglé. In concomitance with the sunrise people have a healthy complexion, while in the night the complexion deteriorates.

¹ Men (dpa' bo) and women of knowledge (mkha' gro) are the tantric adepts that in the evening gather in sacred places to perform mystic practices.



དུས་ཚོད་བརྒྱ་གཉིས་དང་དེང་དུས་ཚོད་འཁོར་ལོ་པན་ཚུན་བསྐྱར་ཐབས་རིུ་མིག

The Vital Fluid's Cycle in the Lunar Month

The vital fluids or quintessence of the bodily elements or bodhicitta begins its monthly cycle in the first day of the lunar month. In the male they begin from the big toe of the left foot, with the vital fluids having the form of the letter a (ཨ). In the female they begin their cycle from the big toe of the right foot.

On the fifteenth day of the lunar month, the vital fluids reach the top of the head in the aspect of the letter a (ཨ). During the hours of light they remain in the head, right above the left channel, in the form of the letter om (ཨྐ); while at night it is situated at the upper opening of the central channel, in the aspect of the letter a: (ཨུ).

In the course of its cycle, the vital fluids move along the points of the lha (i.e., the subtle energy of the physical elements of the body of a person) assuming the aspect of different letters. The white thiglé (or lunar energy) develops gradually until the day of the full moon, it reaches its apex at the top of the head. At the same time, the red thiglé (or solar energy) gradually descends. Therefore, on the day of the full moon, the two thighs stand at opposite poles. On the day of the full moon the power of the white thiglé pervades the entire body.

The lunar energy begins its descending phase starting from the first day of the waning moon, (the sixteenth day of the lunar month). In the very same day the solar energy begins its ascending phase. The solar energy increases gradually and reaches its apex on the top of the head during the night of the thirteenth day. On that day, the power of the solar energy pervades the entire body while the solar energy is at an imperceptible potency.

During the waxing phase of the moon, when the lunar energy is in its ascending phase, people mainly experience feelings of wellbeing and happiness, and the time seems to pass quickly. During the waning phase of the moon, when the solar energy is in its ascending phase, people mainly experience feelings of sadness and suffering, and time is subjectively felt to pass slowly.

However, because in the first half of the month the white thiglé increases, practitioners of the inner heat derive greater experiences of pleasure from their meditation in the second half of the lunar month.

It is also said that the ancient masters of the Dakpo Kagyu (Dwags po bka' brgyud) school would remain in retreat during the waning phase of the moon to avoid possible obstacles the increase of the solar energy could cause to their contemplation.

The Words of the Elder and other treatises state that the area of the channels (or points of the lha) where the vital fluids move has a form that resembles the letters a, i (ཨ་ཨི), etc. Therefore, it would be important to examine in detail the possible correspondence between the points of the lha and the location of specific nerves or endocrine glands to ascertain if there is a relation between the hormones pathways or the hormones themselves, identified in Western medicine, and the points of the lha described in Tibetan medicine.

The Yearly Cycle of the Quintessence

During a year's time the vital fluid with its double white and red components, follows a cycle of increase and decrease related to the change of

the seasons and to the sun's biannual movements that culminates in the two (summer and winter) solstices.

The cyclic movement of the quintessence determines the character of the psycho-physic condition (physical strength and the humor), and the quality of a person's sleep. In *The Secret Explanation of the Adamantine Body*, the yearly cycle is described in relation to the movements of the sun along the celestial vault as follows:

Beginning with the summer solstice (21 June) and for a period of six months, (in the left channel) the lunar bodhicitta¹ increases and flows in the subtle channels. In the right channel the solar bodhicitta increases and moves swiftly in all parts of the body. As time passes, the winds of the twenty-four main channels of the body² decrease during the day and join the winds that flow in the nighttime. In the external environment, the day becomes shorter and the night longer. In the course of these six months (the ascending phase of the lunar energy), males and females enjoy their best physical condition; they do not need to sleep much and are full of energy. In autumn, the lunar and solar energies balance each other and in the external environment harvest comes to maturation. This is the season of the year when the lunar element is on the way to its apex and therefore, pleasure will be the predominant sensation experienced by people. Males, females and children will feel inclined to playful activities, they become richer and enjoy all sense experiences.³ As the months go by, the lunar energy develops and the potency of the solar energy declines. The external environment gets colder until the intense cold of the winter comes. When the sun has completed its transit through the houses of the left,⁴ the winter solstice occurs (21 December). The solar energy or inner heat¹ moving into the right channel increases

¹ In terms of the five elements, the lunar bodhicitta is primarily constituted by the earth and water elements that in the external environment, increases in these six months.

² The twenty-four main channels of the body branch off from the right and left channels, and reach different parts of the body. In the world these channels correspond to the twenty-four sacred places situated in India and in neighboring regions. In their purified or transformed dimension, the channels are represented by the mandala. These channels correspond to twenty-four yogini associated with the primordial condition of body, speech and mind. (*Encyclopedia Indo-Tibetica* vol. II p.633).

³ Wealth here signifies mainly the preservation and increase of the quintessence.

⁴ In Tibetan astrology, the six houses of the left includes Gemini, Cancer, Leo, Virgo, Libra, and Scorpio; the right ones are Sagittarius, Capricorn, Aquarius, Pisces, Aries and Taurus.

its power and slowly penetrates all channels of the body, while the lunar energy moves faster and faster in the left channels. Therefore, the winds of the twenty-four channels that flow during the night decrease and add to the winds that flow during the daytime. In the external world the day becomes longer and the night shorter. The potency of the solar energy increases and, in the external environment, the intense cold dissolves, the body becomes thin and its aspect becomes uglier; the need to sleep increases, and the white and red constituents undergo transformations. People experience desire and aggression, their wealth diminishes, and the enjoyment of sense pleasures is more infrequent. In the external environment, as the solar and lunar energies balance each other, spring occurs. With the increase of the solar energy, sprouts of different plants emerge. People will experience much dissatisfaction. Finally, when the sun has completed its transit through the six houses, the summer solstice takes place once again. Thus, the six months in which the lunar energy develops are the months of increase; the six months in which the solar energy increases are months of decline.

The Vital Fluid's Cycle in the Course of the Entire Life

The vital fluid or white and red thiglé follows a basic cycle of growth and decline connected to the different ages of the person (childhood, maturity and old age). The Secret Explanation of the Adamantine Body states as follows:

From birth till the twenty-fifth year, both [white and red thiglé] develop, but mostly the lunar constituent does. From the twenty-fifth year till the forty-fifth, both thiglé stabilize themselves, but in particular the solar one. From the forty-fifth year onward, both thigles decline, in particular the white one. The elements of the body of ordinary persons interact in a conflicting manner giving rise to various illnesses. Though such conflicting interactions do not cause illness for the yogi, they do however create numerous obstacles on the way to self-realization. The harmonious interaction of the elements of an ordinary person's body maintains the state of health; their harmonious interaction in a yogi's body serves as the condition through which the white and red thiglé become the source of the yogi's attainments.

Thus, the vital fluid in its natural condition favors a good constitution and the absence of illnesses in ordinary people —the radiance, power, mental

¹ The fire element is formed principally by the fire and air elements.

clarity, inner realizations and long life, and encounters with women of knowledge¹ in yogis (who train in the three techniques for the descent, reversal and diffusion of the white thiglé).² The vital fluid represents the physical basis for inner realization's action is comparable to that of the elixir of mercury that transforms metals into gold. In fact, the vital fluid distills the pure aspect of channels, winds and constituents, and dissolves their impure aspects. Thus, the body transforms into a rainbow body indivisibility of appearances and emptiness and into the dimension of total experience (samboghakaya); the mind becomes the knowledge of the primordial dimension of reality (dharmakaya), the indivisibility of radiant awareness, delight, and emptiness.



¹ The encounter, or lit. "gathering of women of wisdom " (mkha' gro 'du ba) refers to a tantric phase of practice in which the yogi gradually receives the help of women of wisdom who are at progressively higher levels of realization.

² In the tantras, the experience of pleasure, the sexual one in particular, is used in order to awaken the primordial awareness. There are fundamentally two techniques used for this purpose: inner heat and sexual union. In both cases, the white constituent situated at the top of the head is stimulated, and made to descend into the channels of the body. Instead of being emitted in the form of semen, the constituent is held by means of breathing and yogic exercises, and reversed toward the upper part of the body, then diffused in all the bodily channels. This is the meaning of the three moments of descent (dbab), reversal (ldog) and diffusion (dkram) of the constituent.

Chapter VIII

Metaphors and Measurements of the Human Body

1 Metaphors of the Human Body

The Exegetical Treatise suggests a comparison between the human body and a king's palace and its inhabitants. The commentaries on The Four Treatises on Medicine simply paraphrase the verses of The Exegetical Treatise on this topic without providing any reasons that substantiate these metaphors. Dr. Tsenam, a scholar of the Troru (Khro ru) monastery in Tibet, correctly states that the metaphors of the King's palace and its inhabitants indicates the major or minor importance of the various parts of the human body.

In The Exegetical Treatise the external structure of the human body is compared to the different parts of the palace as follows:

The left and right hip-bones are like the foundation of the walls which support the building; the vertebrae resemble gold coins piled into a column; the vital blood vessels may be compared to a central column made of precious agate; the rectangular plate of the breast-bone, to the cross beam of the ceiling; the twenty-four ribs resemble well-laid rafters; and the rib cartilage resembles their brackets. The channels, tendons and ligaments are like slender twigs used as ceiling planks, while flesh and the skin resemble the interior and exterior plastering of the building. The two collar-bones are similar to the palace's cornice and, the two shoulder blades to lateral buttresses. The head is like the royal apartment on the palace's roof, and the apertures of the five sense organs are like windows. The skull-bones are akin to a japib (roof of a palace.); the posterior fontanelle to an open chimney; the right and left ears are like garuda-shaped gargoyles¹ [that adorn the corners of the roof] and the two nostrils are like the protrusions of the pinnacle that dominate/crown the roof; the hair resembles interlinking "male" and "female" ties of the roof; the two arms are like silk hangings.

¹ The garuda (khyung), a mythical bird whose power is *antithetic* to that of the naga of the underworld, is represented as a bird-like deity, holding a snake in his *claws* and *beak*.



A palace, or a fortress of any dimension, needs first of all solid foundations to support the walls of the building. The spinal cord is the main bone structure of the body that allows the body to stand erect and its basis are the hipbones. The stability of a building depends on the walls built on foundation, and likewise, the body to be able to stand erect needs the spinal cord that rests on the hip bones.

The stability and fitness for use of the palace depends on the column on which all other elements, such as the cross beam, the planks and so forth, rest. When the column falls, there is no way that the palace can stand. This metaphor points to the vital blood vessels: the vena cava and the aorta that carries blood and wind throughout the body. They are situated in the center of the trunk of the body and are connected to the internal organs. If these two vases are somehow injured, there is no way to preserve the life. Likewise, an injury to the breastbone (compared to the cross beam of the ceiling), to the ribs (compared to rafters), or to other components more or less important of

the palace may result in more or less danger to the life of a person. The head, similar to the royal apartment on the top of the palace, is the place where the brain resides and, as the king governs all his subjects, the brain, connected to the channels of the heart directs all physical and mental functions. On the brain depends the perception of objects of the outer world as stated by The Exegetical Treatise as follows:

The channels that allow the perceptions of the various sense objects are the channels of existence that dwell in the brain from which five hundred minor ones branch.

The windows of the palace that illuminate the rooms symbolize the capacity to perceive objects through the five sense pathways that are like windows open on the outer world. The walls of the royal apartment of the roof of the palace, whose function is that of protecting the king and his retinue, resemble the skull that safeguards the brain from injury. Moreover, the open chimney, the garuda-shaped gargoyles, the pinnacle and the silk hangings, i.e., all the necessary embellishments that confer beauty on the palace of a king, represent the external parts of the body (such as the ears) whose injury does not put life in danger, but may seriously impair the esthetic and functional aspect of the body.

The Exegetical Treatise compares the internal organs to the king and the various ministers:

The upper and lower parts of the trunk are likened to the upper and lower rooms of the palace; and the diaphragm is akin to an outstretched curtain that separates the rooms. The heart is like a king seated on his throne, and the five "maternal" lobes of the lung are like his private advisors; the five "filial" lobes of the lung may be likened to princesses, while the liver and the spleen are akin to the king's senior and junior consorts respectively. The two kidneys resemble the advisers on external affairs, or like athletes that sustain the weight of a beam; the reservoir for reproductive fluid is a treasure-store full of precious things; the stomach is like a cooking pot. The small and large intestine are akin to the retainers of the queens, and, the gall bladder is like a small sack full of various spices. The urinary bladder is like a clay jar filled with water, and the two lower orifices of the anus and urethra are like two drainage gutters; the two legs resemble the stool used to dismount from a horse, beside the entrance.

The body's vulnerable points may be compared to the king's numerous vassals.

The diaphragm that separates the upper from the lower part of the trunk keeps the internal organs in their location and resembles the outstretched curtain that separates the upper and lower rooms of the royal apartments, with separate rooms for the king, the advisors, the princes and the retinue of courtiers.

The heart, situated at the center of the trunk, is connected to the brain by way of different vascular and nervous channels and makes the blood and wind circulate in every part of the body. It is like a king that, seated in the center of the palace, surrounded by his advisors and retinue, governs the entire kingdom by imparting orders.

The five internal posterior or "maternal" lobes of the right and left lungs, connecting directly to the heart through the pulmonary arteries, are like the king's private advisors that assist him in ruling the kingdom. The five anterior or "filial" lobes of the lung sustain and protect the heart as the king's children take care of their father.

Liver and spleen perform the function of digesting foods, help in the process of separation of the pure part from the residue, and, transform the pure part into blood. They are akin to the king's senior and junior consorts respectively and always at his service.

The two kidneys perform the function of developing the physical constituents, to safeguard the organism from viral diseases, to purify the blood and the liquids producing the strength of the body and to clarify the visual perception. They resemble the advisors on external affairs that protect the kingdom from external enemies and at the same time contribute to its stability and growth.

The reproductive organs containing the seed of procreation ensure the descent of the family. They are like the treasure house filled with gold, silver, silk, rare brocades and other precious things.

The stomach, in which the foods and drinks are transformed into nutrients for the body, resembles a cooking pot, in which, by virtue of the fire, foods are cooked and undergo a modification of their nature, assuming different properties.

The small and large intestines are the ways through which the pure part of the nutrients reach the liver, and in addition — through the anus and the urinary tract — expel the residue in the form of feces and urine. They are like the retainers of the queen, who serve the meals and sweep the rooms.

The gall bladder, releasing its digestive-heat-increasing fluid to facilitate the digestion of foods, is like a small sack full of various spices that contribute to the cooking of foods and facilitate their softening.

The metaphors for the bladder, the lower orifices and the legs are easy to comprehend, thus they do not need to be explained.

The vulnerable points, when injured by weapons or poisons, may become a threat to the life of the person, and for this reason they are compared to the king's vassals, invested with the power to govern the territories of the kingdom.

2 The Vulnerable Points of the Body

The vulnerable points of the body directly connect in major and minor ways to the life channels: their injury or trauma can be a threat to life or cause severe damage. The vulnerable points are classified into seven types—those of the muscles, of the soft tissues, of the adipose tissues, of the bones, of the solid organs, of the tendons and ligaments, of the hollow organs and of the blood vessels. These will be described according to the explanation from The Words of the Elders.

The Vulnerable Points of the Muscles:

In the muscles there are 45 critical points:

- a. The five points situated on the skull correspond to:
 - i. (1) The galea aponeurotica at the level of the fontanel,
 - ii. (2) The frontals muscles (points 1 and 2 are particularly critical for children),
 - iii. (3) The occipitals muscles, and
- b. (4-5) The muscles temporal, right and left. The four points of the neck:
 - i. (6-7) The right and left sternocleidomastoid muscles,
 - ii. (8) The omohyoid muscles,
 - iii. (9) The sternohyoid muscle.
- c. The eighteen points of the trunk:
 - i. (10-11) The right and left spinalis muscles,
 - ii. (12-13) The right and left trapezius muscles,
 - iii. (14-15) The right and left gluteus medius,
 - iv. (16-17) The right and left pectoralis major,

- v. (18-19) The right and left subscapularis,
- vi. (20-21) The right and left serratus anterior,
- vii. (22-23) The right and left elevator scapulae muscles,
- viii. (24-25) The major and minor rhomboid muscles, and
- ix. (26-27) The infraspinatus muscles (the eighteen vulnerable points of the limbs):
 - x. (28-29) The deltoid muscles;
 - xi. (30-31) The brachioradialis,
 - xii. (32-33) The extensors digitorum muscles,
 - xiii. (34-35) The abductor pollicis,
 - xiv. (36-37) The abductor pollicis brevis,
 - xv. (38-39) The sartorius muscles,
 - xvi. (40-41) The rectus femoris muscles,
 - xvii. (42-43) the gastrocnemius muscles, and
 - xviii. (44-45) the lateral and medial heads of the gastrocnemius muscles (See fig. n.).
- xix.

The Vulnerable Points of the Lymphatic Glands:

The Vulnerable Points of the Soft Tissue Correspond to the Eight Lymphatic Glands (4 situated in the right and 4 in the left side of the body):

- A. (1-2) the two glands called "blue head" situated at a distance of four finger-widths (in the direction of the neck) from the meeting point of the collarbone and the head of the humerus;
- B. (3-4) the two "brown" glands situated in the area of the biceps muscles at a distance of five finger-widths from the humerus;
- C. (5-6) the two "white" glands situated at a hand span above the anterior part of the knee (lower thigh);
- D. (7-8) the two glands called "snake's head" situated three finger-widths above the aforementioned "white glands" (upper thigh). (See. fig. n.).

The Vulnerable Points of the Bones:

The 32 vulnerable points of the bones correspond to:

A. the 14 bones of the skull, i.e.,

- i.) (1-2) parietal bones,
- ii.) (3) occipital bones,
- iii.) (4) the frontal bones,
- iv.) (5-6) the sphenoid bones,
- v.) (7-8) temporal bones,
- vi.) (9-10) the supraorbital foramen,
- vii.) (11-12) zygomatic bones, and
- viii.) (13-14) the inferior the mandibular ramus;

B. the five bones of the neck:

- i.) (15-16) transverse process of the cervical vertebrae,
- ii.) (17-18) superior articular aphofisis of the body of the cervical vertebrae
- iii.) (19) the body of the cervical vertebrae;

C. seven of the bones of the body in general:

- i.) (20-21) the two scapula,
- ii.) (22-23) the two clavicles,
- iii.) (24) the vertebral column,
- iv.) (25) the sternum, and
- v.) (26) the coccyx;

D. the six vulnerable bones of the limbs:

- i.) (27-28) the two patellofemoral joints,
- ii.) (29-30) the talus of the right and left foot, and
- iii.) (31-32) the calcaneus of the right and left foot (see. fig. n.).

The Vulnerable Points of Tendons:

The 14 Vulnerable Points of Tendons and Ligaments correspond to:

- A. (1-2) ligaments of the neck,
- B. (3-4) ligaments of the shoulders,
- C. (5-6) ligaments of the anterior part of the knee,
- D. (7-8) tendons of the calcaneus,

- E. (9-10) the (upper and lower) transverse and crossed ligaments of the ankle
- F. (11-12) ligaments of the elbow, and
- G. (13-14) the transverse ligaments of the wrist.

The Vulnerable Points of the solid and hollow organs:

On the 13 vulnerable points of the solid and hollow organs, opinions differ. The Exegetical Treatise relate the 13 points exclusively to the solid organs; the commentaries on The Four Treatises on Medicine place the 13 in both solid and hollow organs. Without denying the former, here we shall follow the opinion of the commentaries:

- A. (1) the right and left atrium of the heart,
- B. (2) the middle lobes of the lungs,
- C. (3) the right lobe of the liver,
- D. (4) the meeting point of spleen and the tail of the pancreas,
- E. (5) the area of the renal pelvis,
- F. (6) the oesophagus,
- G. (7) the gall bladder,
- H. (8) the ascending colon,
- I. (9) the duodenum,
- J. (10) the prostate gland,
- K. (11) the rectum,
- L. (12) the sigmoid colon, and
- M. (13) the seminal vesicles and ovaries.

VI There are 190 vulnerable points of the blood vessels: sixty-two vessels of the head, thirty-three of the neck and ninety-five of the trunk. These will not be explained here.¹

¹ The vulnerable points of the blood vessels will be explained in a forthcoming volume by the author on Tibetan medicine in the context of the bloodletting therapy.



3 The Measurements of the Human Body

The Exegetical Treatise states the following:

The measurement of wind is equal to the volume of one's urinary bladder. The volume of bile is equal to the capacity of one's scrotum/testicles. The measurement of phlegm is three cupped handfuls. The measurement of the blood and the feces are seven cupped handfuls each. The measurement of urine and lymph is four cupped handfuls each. The fat and adipose tissue measure each two cupped handfuls. The vital fluids and semen (or ovarian contents) a single handful. The brain measures one cupped handful. As far as the quantity of flesh and muscle tissue is concerned the male body amounts to five hundred closed handfuls. While the female breasts and thighs additionally comprise ten closed handfuls each. The bones are of twenty-three types. Among these, the vertebrae column has twenty-eight vertebrae, the ribs are twenty-four. While the teeth are thirty-two, the major and minor bones are three hundred and sixty. The major joints are twelve, and the minor ones are two hundred and ten. The ligaments are sixteen and the

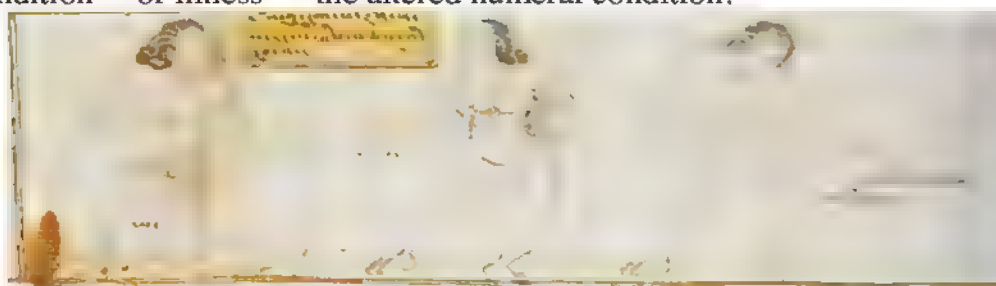
tendons nine hundred. The hairs are twenty-one thousand; the pores of the skin are eleven millions. While the solid organs are five, the hollow ones are six, and the orifices are nine. From top to bottom, the body of the inhabitants of this world is of four cubits. A human body devoid of grace is three-and-a-half cubits tall.

According to Western books of human anatomy, the total number of bones is 206, therefore, less than three hundred and sixty maintained by Tibetan medicine. The doctor and scholar Troru Khenpo Tsenam (Khro ru Mkhan po Tshe nam) explains this discrepancy in the following way:

The total number of bones according to Western medicine relates to those found in the body of an adult, while the total number of bones counted in Tibetan medicine refers to those in the body of a child. Observations done of corpses reveal that there are various bones that fuse with adjoining bones, thus losing their individual identities in the course of a child's physical development. Therefore, the development of the bones is accompanied by a gradual reduction in their number.

4 Human Categories

All humans differ according to sex (male female, neuter), age, natural constitution, and physical condition, i.e., health —the balanced humoral condition —or illness —the altered humeral condition.



The Exegetical Treatise distinguishes the age of the person by dividing life into three periods:

Childhood goes from (birth) to sixteen years of age;
maturity goes from sixteen to seventy years of age.
After seventy years have passed, old age sets in.

The fact that this treatise considers the period that goes from 50 to 70 years as that of maximum male potentiality is probably to be understood in reference

to the living circumstances of ancient Tibet, as told by the following ancient proverb:

The sixty year-old man, powerful and with
the face of a tiger, is the most feared hunter
of deer and enemies. He is a mate for a fifteen
year-old maiden.

However, nowadays in Tibet, the different periods of life are distinguished more or less as they are by the Western standard. Childhood is considered as the period that goes from birth to the tenth year of age; youth is the period that goes from the tenth to twenty-fifth year, and adult maturity extends from the twenty-fifth to the forty-fifth year of age. After this period, aging begins.

The natural constitution of the individual is determined by the predominance of one or more humors in the body. There are seven natural types of constitutions, those (1) with a predominance of wind, (2) with a predominance of bile, (3) with a predominance of phlegm, (4) with a

predominance of wind and bile in combination, (5) a combination of phlegm and wind, (6) combination of phlegm and bile in combination, (7) and with a parity of all the three humors.

The Exegetical Treatise describes the characteristics of the different natural constitutions in the following way:

Wind categories:

People with a predominance of wind are stooped, thin, dark-complexioned, and talkative. They do not withstand cold and wind well, walk with creaking sounds [of the joints]. They never become wealthy, their lifespan is short, and they sleep lightly. They are short of height, and are prone to singing, laughter, pugnacity and hunting. With a preference for sweet, sour, bitter and hot foods, they combine the traits of the vulture, the crow and the fox.



Bile categories:

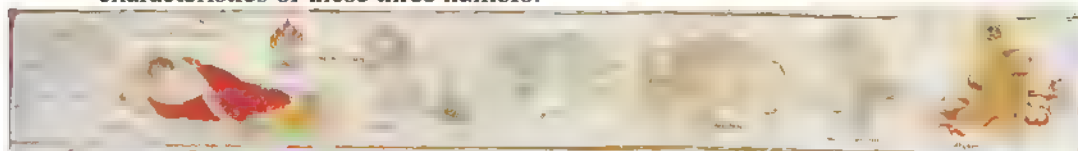
People with a predominance of bile frequently feel

hunger and thirst. Their skin and hair are yellowish they are sharp-minded and very proud. They perspire much, smell, and have an average lifespan and medium wealth. With a preference for sweet, bitter, astringent and cool foods, they combine the traits of the tiger, the monkey and the yaksha.¹



Phlegm categories:

People with a predominance of phlegm have cool bodies, the articulations never stick off, and they are muscular and fair-complexioned. Their bodies almost curve backwards; they are able to endure hunger, thirst, and emotions. They are portly, destined for great wealth and longevity, and prone to heavy sleep. It is hard to irritate them and they are good humored. With a preference for hot, sour, astringent and harsh foods, they combine the traits of the lion, and the head of the bison herd. People with a combination of two or three humors have the mixed characteristics of these three humors.



Concerning these characteristics, Doctor Trabum's Commentary on the Four Treatises of Medicine states as follows:

People with a predominance of wind have traits that resemble those of the vulture, crow and the fox: they have little physical strength but a lot of desire, and are not liked by others. [People with a predominance of bile] have traits that resemble those of the tiger or monkey because they are enterprising; they also resemble the non-humans called yaksha because

¹ Yaksha (gnod sbyin), semi divine beings, generally benevolent at times are classed among malignant spirits. Same Tibet doctors also consider it a cat.

they are malicious. [People with a predominance of phlegm have traits resembling those of] the lion, in that they are powerful and at the same time devoid of malice. They resemble the head of the herd, in particular the ox, because that is the animal that has the most slow and stable character.

People whose natural constitution combines wind and bile have small bodies; those who combine phlegm and wind have bodies of medium size; those who combine phlegm and bile have big bodies. Similarly, the other characteristic traits such as the behavior, the tone of the voice and the attitude, are mixed.

People in whose natural constitution all the three humors are present in equal measure have the combined characteristic of the three humors, and exhibit the best physical traits and personality: they are not too big, nor too short, have all traits in the appropriate measure, and suffer few illnesses.

Chapter IX

Physical Decay

At each and every moment the things of our universe are subject to change. The human body too, from the very moment it is born, begins the process that will ultimately lead to death.

At birth, a connection between the body and the external world is established that will continue throughout life. The birth year of the person determines (for all people born in that year) the general quality of his or her life-energy, body, capacity, fortune and of the lha.

Specific factors such as the month, day, hour, planets and constellations, and additionally the physical constitution of father and mother, prefigure the physical and psychological distinguishing features of each person.

Once these connections are established, the continuous interaction taking place between the person and the external world will determine the amelioration or deterioration of the person's physical condition, and the person's feeling of well-being or suffering linked to psychological condition.

1 The Origin of the Signs that Indicate Physical Decay

Physical decay is announced by signs or omens indicative of death. The presence of fire can be deduced by smoke and the presence of a pond by herons; likewise, dreams, auspicious or inauspicious, and changes of mood may foretell the encounter with favorable or unfavorable influences.

Such influences, which arise from the interaction of the person and the external world, and are felt throughout the day and even in each moment of our life, are part of the natural dynamic.

Nonetheless, the harm or benefit that they may bring is reversible. The Conclusive Treatise of Medicine gives the following account:

The body of any creature is formed from the four elements;
The ailments themselves, which are to be cured, are caused
by the four elements.

The remedies, or medicines themselves, are of the nature of
the four elements,

Thus, body, illness and the remedy are linked by an identical nature,
and karma brings together patients with their particular doctor.

Accordingly, when external influences attack the person's health, they can be averted by taking recourse to a remedy whose properties are able to

counteract this aggression. Through the horoscope (*of the person's entire life*) or through other means, undesirable situations that may occur in a particular year can be foretold. When such undesirable situations manifest or are announced by premonitory dreams, these can be prevented and averted by changes in one's life habits. For example, one can go to live in a different place, change the shape and color of one's bed, or wear clothes of colors different from those one usually wears. These methods utilize the properties of the four elements, expressed through forms and colors. If the properties of forms and colors interrelate positively, in accordance with the criteria of the "four cycles: mother and son, friend and enemy"¹ with the general characteristics of the individual (life energy, body, capacity, etc.) They will influence the person favorably, otherwise they will have a negative influence.

Customarily, in Tibet, to encourage the recovery of a person from an illness, rituals of *gto*, *del mdos*, and *yas e²* and other rituals are performed. To symbolize the five elements, ritual objects such as silk or woolen scarves of different colors, ritual objects such as the *namka*,³ or the three-dimensional *namka* (built with threads of various colors), and multicolored arrows, and tops are used. Other methods include laying lime on the floor of the house and the kitchen, piling votive images in the vicinity of one's house and raising prayer flags. These rituals and methods are intended to avert the harm a negative combination of the elements might bring. In ancient times, these rituals were performed on the basis of knowledge of the energy of the elements. In our time, we can perhaps find a scientific explanation for these rites. Nonetheless, they may seem to be sheer superstition when performed by people ignorant of the underlying principles.

Examining the Distant Indications Predicting Death: In Tibetan medical treatises, the distant indications predicting death are examined taking into consideration include the following: (a) indications concerning the messenger from the patient, (b) indications that are revealed in dreams, and (c) the mood of the patient.

¹ The four cycles of "mother, son, friend and enemy" (*ma bu dgra grogs*) in Tibetan medicine and astrology represent the different ways the energies of the elements may combine with each other. Such combinations determine the changes that take place in the external world (climatic conditions etc.) and in the human body. Each energy is named after an element that in nature best symbolizes the function of such energy. wood, fire, earth, metal and water.

² Ancient Bon rites. See *Drung Deu Bon*, Namkhai Norbu.

³ The *namkha* (*nam mkha'*) is a wooden structure connected by colored threads in a way that harmonizes the imbalanced elements of the person.

2 Examining the Messenger from the Patient

This is a system used by the doctor to investigate the auspicious or inauspicious circumstances associated with the arrival of the messenger from the patient in the doctor's presence or those that occur at the time or on the road as the doctor visits the house of the patient.

1) A messenger is unfavorable when he or she is a villain, malicious, has an inauspicious name, wears unorthodox clothes or ornaments or speaks insultingly.

The moment is inauspicious when the messenger finds the doctor angry, swearing rudely, chopping or destroying some material objects, making offerings on behalf of deceased ancestors, or performing a burnt offering ritual.¹

Unfortunate times for the doctor to set out for the patient's house include the fourth, the sixth and the ninth days of the lunar month,² the days of a solar or lunar eclipse, days on which there is a negative combination of the elements of the day, of the week, and the elements of the corresponding constellation (as in the so-called "deadly combination" between the fire and the water element), and when it is getting dark.

Unfortunate omens encountered by the doctor on the road to the patient's house include: the breaking of objects the doctor carries, seeing something being burnt or broken, hearing someone weeping, assisting in a murder, having the road crossed by a cat, a monkey, an otter or a snake.

2) A messenger is auspicious for the recovery of the patient when remarkable, i.e., educated, dedicated to virtue, of noble aspect, and whose garb and language conform to the best customs of the country.

The types of fortunate omen encountered on the road by the doctor that foretell the recovery of the patient, are described in The Exegetical Treatise in the following ways:

It is auspicious to see a jar full of cereals or curd,

¹ Burnt offering rite (*homa*, *sbyin sreg*): an ancient Tibetan ritual with pacifying, enriching, domineering, and destructive purposes. It is performed by offering various substances and foods to the divinities imagined within the fire

² In the texts of Tibetan astrology, I have not found confirmation of the idea that the fourth, the sixth and the ninth days of the lunar month are inauspicious; nor is this idea known in present-day Tibet. It is possible, however, that in ancient Tibet, these days were thought of as unfavorable because of the resemblance their names bear to terms that have negative connotations: the pronunciation of "fourth" (*bzhi*) is pronounced as *shu* meaning "to die;" "sixth" (*drug*) resembles that of *grug* which means "to crumble;" "ninth" (*dgu*) is pronounced like *rgud* which means "decline."

a ritual bell, a burning butter lamp, flowers, rice, roasted barley, cooked barley dough balls, an image of a deity, white ornaments, someone performing religious practices, someone raising a victory standard, a burning fire, a newly born foal, lamb, calf or another animal with the mother, to hear melodious singing, to see delicious foods and drinks or gracious ornaments.

The interpretation of the signs that enable the doctor to understand whether the patient will recover or die is related to the culture and history of each country. It is difficult to attribute to it universal and scientific validity. Some signs viewed as favorable in a certain society are unfavorable for another. It should be understood that the aforementioned description taken from *The Exegetical Treatise*, fits and is linked to Tibetan customs.

Premonitory signs are not groundless because sometimes animals are more sensitive than human beings. Some domestic animals (yaks, dogs, mice, etc.) can tell if there is an earthquake coming or birds can indicate if it is going to rain. Why not pay more attention to them?

Animals can sense the internal and external signs of the elements. There is more meaning in their behavior than we think.

3 Dreams Indicating Death

Cause of the Dreams

The signs appearing in dreams manifest principally in relation to the function of the channels and winds in the body. In its nature, the dream state is defined as a mental activity that takes place when the life-sustaining wind stimulates the so-called "sixth consciousness" (*drug pa yid kyi shes pa*)¹ or subjective mind of emotionality accompanied by predispositions from the past and connected to the consciousness which is the foundation of all.²

¹ The sixth consciousness (*drug pa yid kyi shes pa*) is the mental consciousness distinct from the five sense consciousnesses (visual, audible, etc.). In this context, it indicates the subjective mind, which is constantly conditioned by the conception of the self

² The fundamental consciousness, or consciousness foundation of all (*alayavijana*, *kun gzhi'i rnam shes*) that in the Idealistic trend (*cittamatra*, *sems tsam pa*), of Buddhist philosophy is posited as the receptacle of all karmic predispositions, in this context is undifferentiated from the basic reality of things or intrinsic luminosity of the mind. This luminosity, reality of both mind and phenomena, transcends all the distinctions of subject and object, limitation and liberation; nonetheless when its nature is not recognized it becomes the basis for the deceptions of conditioned existence.

Dreams belong to two general categories: those indicative of physical condition (good or bad) and those relevant to prognostications concerning the death or recovery of a patient. The Exegetical Treatise states that there are six types of dreams:

Those that manifest as a result of seeing, hearing,
sensations, aspirations, prophetic dreams and dreams
that manifest because of the three humors.

The first type of dream results from the visual impressions of the day (mthong ba'i rmi lam). The second type of dream arises as a result of external sounds and noises one hears while sleeping (thos pa'i rmi lam). The third arises as a result of the sensations (of a somatic nature) that are experienced during sleeping, (roughness, lightness, and heaviness) which may be pleasant or unpleasant (mnyong ba'i rmi lam). The fourth arises in relation to the aspiration of the individual (gsol ba btab pa'i rmi lam).

Below, we shall discuss the fifth type of dream, the prophetic dream, extensively, as those relevant for prognostications concerning the fate of the patient.

The sixth type of dream is one influenced by one or more of the humors that characterize the natural constitution of the individual (nad kyi rmi lam).

With the exception of the fifth type of dream, even though the others may resemble signs indicating healing or death, in reality they do not indicate anything positive or negative in this respect.

The only type of dreams, which will bear consequences in the future, are auspicious or inauspicious dreams (useful for a prognostication concerning the patient), known as "prophetic dreams" (bras bu grub pa'i rmi lam). Such dreams manifest during the state of sleep when the "subjective mind of emotionality," and the life-sustaining wind cannot flow in the channels because the channels are blocked by the impurities caused by the imbalance of one or more humors. This obstacle to their flow, caused by the physical or mental imbalance, produces inauspicious signs arising in dreams.

Unusual dreams of prophetic value also manifest when the life-sustaining wind enters the right channel (or vein system), a location which is not its own. When this condition persists, it may constitute a serious threat to the life of an individual.

Therefore, dreams of this kind represent an alarm bell warning of a possible danger to health.

The Words of the Elder describes how the dream's experiences manifest in the following way:

As the six consciousnesses are absorbed at the heart region [the state of deep sleep takes place]¹ and [the subjective mind of emotionality] together with the life-sustaining wind, flows into the channels. When mind and wind ascend to the crown of the head, they create images related to celestial realms, and dreams of flying in the sky, or of climbing a mountain, occur. When mind and wind reach the channels of the eyes, the dreamer experiences distinct forms; likewise when they enter the channels of the other sense organs the dreamer experiences distinctly the respective sense objects. When mind and wind move from the heart to the lower part of the body, in the genital region for instance, a dream of descending, of entering the hells or into the world of spirits tormented by hunger and thirst, or into the animal world, or a dream of proceeding head downwards, of falling off a precipice, or one of gloomy visions of entering into darkness or into a thick forest etc., occur. When mind and wind move in the channels of the central part of the body, they create images related to the four continents. When mind and wind move in the posterior part of the body, a dream of moving eastwards arises; when they move in the right side of the body, a dream of proceeding southward arises. When they move in the anterior part of the body, a dream of proceeding westwards arises; when they move left, a dream of proceeding toward the north arises; when they move in wide channels, a dream of being in spacious environment arises; when they move in narrow channels, a dream of being in a constricted environment occurs. The right part of the body is linked to the southern direction, therefore, when the life-sustaining wind enters the right channel (or

¹ During sleep, the five sense consciousnesses and the mental one temporarily stop their functions while the consciousness foundation of all remains active.

² The four continents (gling bzhi) refer to four main regions of the ancient Indo Tibetan cosmology known as: Majestic Body Corpo (*videha, lus 'phags po*), Land of Jambu (*jambudvīpa, 'dzam bu gling*), Bountiful Cow (*godaniya, ba lang spyod*) and Unpleasant Sound (*kuru, sgra mi snyan*) Trans.

the vascular system) indications of death manifest as a repeated dream of proceeding south.

Dreams may be prophetic or not depending on the period of the night in which they manifest. The Exegetical Treatise states the following:

[Dreams that occur] in the first half of the night and those that are forgotten bear no consequences, and dreams that at dawn and those that are very clear are prophetic.

Concerning this, The Words of the Elder describes the following:

Dreams that occur in the day, those that are not remembered, or those that last only a short time, do not bear any consequences. Dreams that manifest in the second half of the night are indicative of events that will take place in a remote future. Dreams that manifest at dawn, when the farmers lead the cattle to the pasture become evident reality in the same day, provided that the dreamer does not fall back to sleep, and that the dream is not followed by other dreams, and that their indications are not contradicted by words heard by the dreamer as soon he or she awakes.

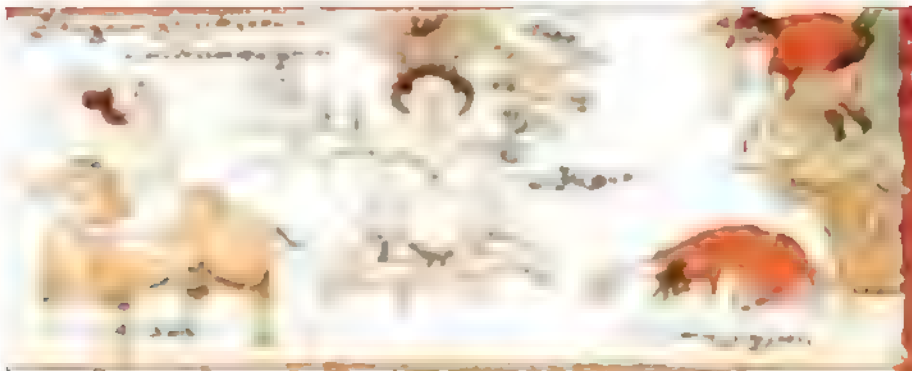
Inauspicious Dreams

The Exegetical Treatise describes the inauspicious dreams in the following way:

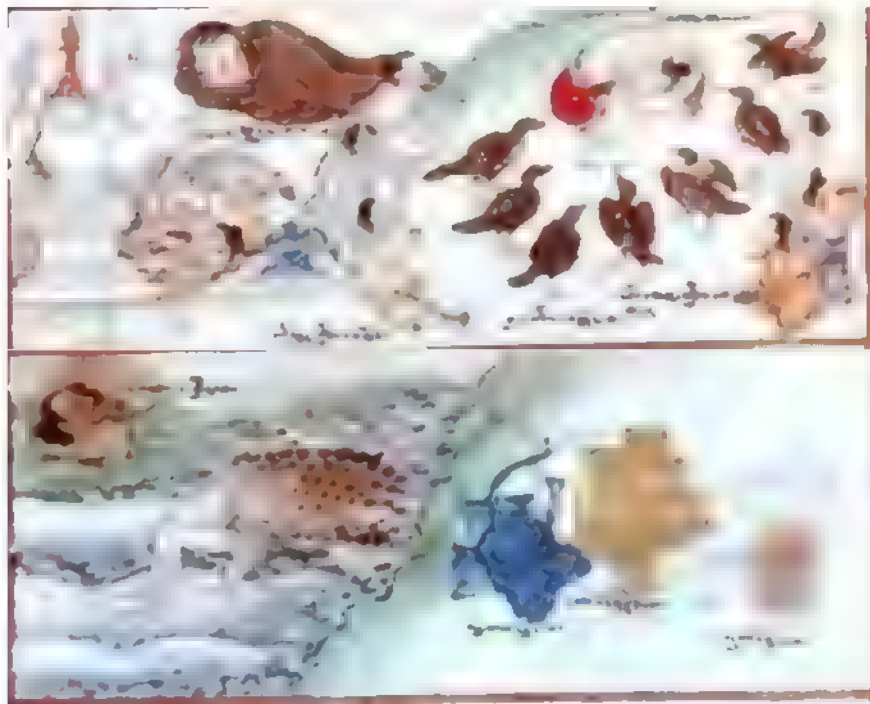
Dreaming of riding a cat, a monkey, a tiger, a fox, or a human corpse, is an indication of death.
Dreaming of riding naked on a buffalo, a horse, a pig, a donkey, or on a camel, in a southern direction is an indication of death.



Dreaming of a bush with a bird's nest growing
from the crown of one's head, of a thorny palm
tree growing from of one's heart, of a lotus

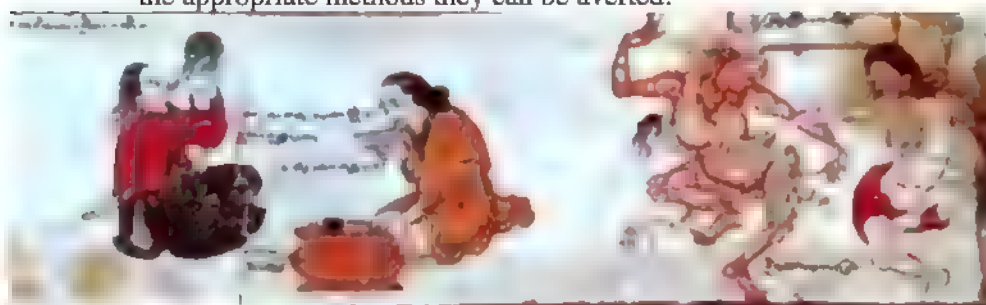


flower emerging from [the heart], of falling into an abyss of sleeping in a cemetery, of having one's skull broken, of being surrounded by ravens, tormented spirits, and villains, of having the skin peeled from one's legs, of re-entering one's mother's womb, of being carried away by the current of a river, of being eaten by a fish, of sinking into quagmire, of finding iron or gold, of being defeated in a business venture



or in a fight, of being forced to dance, of taking a bride, of sitting naked, of having one's hair cut, and having one's beard shaven, of drinking ale

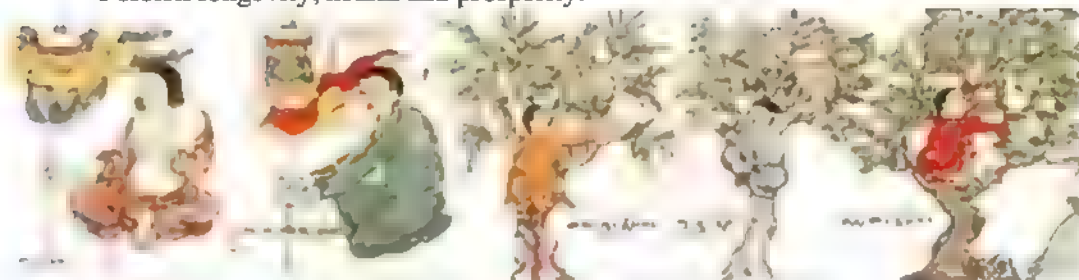
with deceased people, of being led away by them, of wearing red clothes and red necklaces of dancing with the deceased ones, are dreams influenced by the lord of death. These and other inauspicious dreams manifest as a result of the humors obstructing the mind's movement in the channels; if these dreams occur repeatedly, the sick person will die. In a healthy person, they do not necessarily foretell [death]; with the appropriate methods they can be averted.



Auspicious Dreams

Concerning the auspicious dreams, The Exegetical Treatise states as follows:

Dreaming of a deity, of a herd-leader, of a celebrity, of a burning fire, of a lake, of having one's body besmeared with blood or feces, of wearing white clothes, a decorative silk pendant, of a parasol, of finding fruits, of climbing a mountain, the roof of a beautiful house, a fruit tree, of riding a lion, an elephant, a horse or an ox, of crossing a river or a lake, of going north-east, of escaping from misery, of defeating one's enemy, of being worshipped by a deity or one's parents, Foretell longevity, health and prosperity.





4 The Patient's Mood Condition

Signs Related to Sudden Changes in the Patient's Mood Condition: When the body and the external world begin to interact in a disharmonious way, a causeless and sudden change of appearance, speech, and attitude of the person may take place. These changes are indications that death though distant, is approaching.

For instance, the patient has a good character, is friendly, intelligent and has a radiant appearance, suddenly becomes sullen, irritable, depressed, and his or her complexion turns sallow for no apparent reason.

Death is also portended by a sudden and striking improvement of the character and the physical appearance of the person.

The same applies to sudden transformations of good or bad qualities: if the patient, without any motive, becomes displeased and angry with the doctor, or medicine, or with his or her spiritual advisor, or with his or her relatives or friends, or if his or her character becomes gentle and his or her face better looking. The body and the face turn ugly, as if the person was undergoing a serious illness. The person looks terribly unhappy. If they offer a tormo to the crows (sha ru) they will not eat it. If they wash the heart area it dries immediately. The fingers do not crack, the body cannot assimilate nutritious food, and the scent of the body changes. The patient gets ticks or tick's eggs; or if the patient had ticks before getting so ill, these abandon the body.

On other indications of death, The Exegetic Treatise states that "death is on its way if one's image reflected during the day-time in a mirror or in water, or in the sky, is incomplete in head or limbs."

The Words of the Elder explains in the following way the incomplete reflection of one's body in the sky:

If one casts a fixed look at one's shadow on a sunny and cloudless day and, suddenly switching the sight to the sky, the image should appear for a moment in its entirety and of a grayish color; if it does not, it is a sign of death.



5 Presages of Impending Death

The signs that indicates an impending death are the following:

Bleeding from any of the nine orifices when one has not ingested poison or has not been wounded by weapons, forgetting what one has just said, retraction of the penis and protrusion of the testicles or vice versa; coughing or sneezing with an unusual sound, insensitivity to the smell of an expired butter lamp, lacking the sensation of pain when the hair is pulled out, or having an oily crown of the head, formation of new partings in the hair and eyebrows, or the raising of the hair and of the eyebrows, lines resembling the form of a new crescent moon of the forehead and above the bladder.

Failure to perceive real and common objects though the sense organs are intact and healthy (and there are no perceptual distortions caused by incantations or substances), perceiving imaginary forms and sounds are indications of impending death.

One indication is the inability to see the wrist when you place your middle finger between the eyebrows. You should be able to see a thin line. If it is broken or inexistent then it is a sign of death. Another indication is the inability to perceive the light when the eyes are pressed. Remaining a long time with wide open and fixed eyes, like a sleeping rabbit, retraction of the eyes, and lusterless pupils are seen as further indications of death. Adherence

of the ears to the skull bones, interruption of the humming sound of the ears perceived when the ears are cupped.

The Exegetical Treatise states that "You can't see the shadow of the vapor coming up from the head. " The "Words of the Elder" explain as follows:

When you are in the sun, vapor comes up from
your head, but if you cannot see the shadow of
this vapor it is an indication of death.

Dr. Trambu's Commentary on the Four Treatises on Medicine explains as follows:

When you are in the sun the shadow of your
head has vapor. If you can't see this it is a sign
of death.

As I cannot explain this phenomenon, I suggest we should investigate it. Signs of impending death include the following: distension of the nostrils and their being covered by dry mucus, darkness, dryness and shortness of the tongue which is incapable of speech, the lower lip that sags and the upper lip that is elevated, the face that is covered with perspiration, the breath that flows though the nostrils and nose that becomes cold, the teeth that become covered with black coating again and again, the inhalation that becomes difficult and the bodily heat that disappears, illnesses of a hot nature manifesting in the presence of a cool body temperature, the refusal of foods and behaviors that have hot properties in the presence of an illness of cold nature, inefficacy of diet, conduct, medications and external therapies, slight recovery brought about by a wrong therapy, etc.

6 Signs of Extremely Imminent Death

During the phases of formation and development, the five elements — earth, water, fire, air and space — which constitute the body, nourish each other. In the phase of physical decay, the five elements become inimical to each other and begin to harm each other. The process that leads to death starts

when the potency of each element gradually vanishes into the other until the potency of all the elements is dissolved.

Absorption of the Elements

The progression in which the elements lose their potency is related to specific clinical signs as follows:

Upon the absorption of the potency of the earth element into that of the water element, the person ceases to grasp the gross and subtle forms. The person loses eyesight. Upon the absorption of the potency of the water element into that of the fire element, the nine orifices dry up, losing their wet and humid aspect. Upon the absorption of the potency of the fire element into that of the air element, the bodily heat disappears gradually from the extremities. Upon the absorption of the potency of the air element into the space element, the breathing and the other functions of the organism stop.

Banishment of the senses

The progressive absorption of the potencies of the five elements is accompanied by cessation of the functional capacity of the sense organs as follows:

When the functions of sight stop, the visual forms become fainter until they disappear into the sense-field of sound; thus, the person has the impression of hearing loud noises. When the function of hearing stops, the external sounds become fainter until they disappear into the sense-field of smell. When the olfactory functions stop, smells become faint until they vanish into the sense-field of gustatory sensations. When the gustatory functions stop, tastes become fainter until they disappear into the sense-field of tactile sensations. Lastly, when the tactile functions stop, tactile sensations become indefinite until they dissolve into the life-sustaining wind. The life-sustaining wind, in turn, dissolves into the consciousness that by now moves toward a new existence.

In most terminally ill patients, the loss of the potency of the elements and of the function of the senses occurs gradually, in the above fashion. In cases of sudden or accidental death (being crushed under rocks, killed by weapons or by falling into a precipice), the functions of the sense organs cease instantaneously. The tantras give detailed descriptions of the signs of death associated with the process of absorption of channels, winds and vital fluids and of the process of absorption of the potency of the five elements. These descriptions, however, differ from the descriptions found in Tibetan medicine in that they relate to a human life that lasts for one hundred years, in which the signs of death (that begin to manifest when half of that period has elapsed) are associated with the gradual exhaustion of the primordial awareness wind.

Chapter X Pathology

1 Primary Causes of Disease

The primary causes of disease are classified into those distant and proximate. The remote causes include the ignorance [of reality] which, being the substratum for all kinds of suffering, is posited as the general remote cause of all illnesses.¹ The particular primary causes, i.e., the three basic emotions of desire, aggression and delusion (which arise from ignorance), produce respectively the humors of wind, bile and phlegm. The three humors or their modification constitute the immediate causes of disease. There are certainly remote specific causes for specific illnesses that affect the individual, but these cannot be fathomed by an ordinary intellect. The disease arises when the balance of the three humors is disrupted, thus, the primary immediate causes of disease refer to the alteration of the natural condition of balance of the wind, bile and phlegm. When this happens, the three humors take on the nature of the disease.

All the 404 illnesses can be subdivided in two general categories: illnesses of a hot nature and illnesses of a cold nature. Accordingly, The Exegetical Treatise states the following:

A disturbance of bile burns the bodily constituents,
because it possesses the hot nature of fire.
Though it is located in the lower part of the trunk, its [disturbances] manifest in
the upper part of the trunk;
Bile produces all illnesses of a hot nature without exception.
Disturbances of phlegm destroy bodily heat.
Because it possesses the heavy and cold nature of water,
though it is located in the upper part of the body, descend to the lower part;
All illness of a cold nature arises from phlegm.
Wind pervades both [illnesses] hot and cold,
When combined with the sun it assists burning;
When combined with the moon it assists cooling.
Develop in the upper, lower, internal, external, of the body;
Wind causes and fully manifests both illnesses of hot and cold nature;
Wind is therefore the primary cause of all diseases.

¹ Ignorance (avidya, ma rig pa) in Buddhist philosophy, refers to misunderstanding that attributes a truly existent nature to things and which is based on lack of recognition of the ultimate nature of things (i.e., emptiness).

2 Secondary Causes

Besides the primary causes, there are three types of concomitant conditions for the arising of illnesses. Accordingly, The Exegetical Treatise describes as follows:

Three secondary causes assist the primary ones:

Formative and developing, cumulative and arising, and manifesting conditions;

Formative and developing [conditions] increase the disease;

The cumulative and the arising conditions refer to the manifestation of the disease;

The manifesting conditions refer to the factors that activate the accumulated

The general secondary causes, formative and developing, cumulative and arising conditions, and manifesting causes are illustrated in the following tables.

Formative and Developing Conditions

Table of the formative and developing conditions for diseases

Season	Deficient	Deficient heat during the summer; deficient cold during the winter and deficient rain in the rainy season.
	Excess	Excess of heat during the hot season, excess of cold during the cold season, and excess of rain during the rainy season.
	Opposite	Cold during the warm season; heat during the cold season; drought during the rainy season.
Sensory Experience	Deficient	Deficient use of the senses entailing little or no contact between the senses and their objects.
	Excess	Excessive use of the senses entailing prolonged contact or extreme application with sense objects.
	Opposite	Sensory perceptions focused on extremely close or distant, too large, too small, frightening or unpleasant objects.
Behavioral Pattern	Deficient	Deficient exercise of body, speech or intellect.
	Excess	Excess of physical exercise, speech or intellectual work.
	Opposite	Behavior opposite to the natural physiological functions (for instance, forceful retention in urination and defecation); to one's physical capacity (for instance, to carry excessive weight) and to one's social relationships (for instance, to create enemies by behaving and speaking improperly).

The Cumulative and the Arising Conditions

The primary causes of accumulation, arising and pacification.

Table A

Wind	Phase of Accumulation	Diet or medicines with harsh, light, penetrating, hard, mobile or lean properties that accumulate the humor of wind (but do not cause its imbalance) if combined with a diet or medicines with hot properties
	Phase of Arising	Diet or medicines with properties corresponding to those of the wind humor that, on the basis of the pre-existing accumulation of wind, causes the imbalance to arise.
	Phase of Pacification	The imbalance of wind is pacified through a diet or medications with oily, hot, heavy, smooth and stable properties.
Bile	Phase of Accumulation	Diet or medicines with penetrating, oily, smelly, purgative and humid properties that accumulate the humor bile (but do not cause its imbalance) if combined with a diet or medicine with cooling properties.
	Phase of Arising	Diet or medicines hot properties with corresponding to those of the bile that, on the basis of the pre-existing accumulation of bile, causes the imbalance to arise.
	Phase of Pacification	The imbalance of bile is pacified through diet or medications that have blunt, lean, heavy, dry and cool properties.
Phlegm	Phase of Accumulation	Diet or medicines with heavy, oily, blunt, stable properties that accumulate the humor of phlegm (but do not cause its imbalance) if combined with a diet or medicines with cooling properties.
	Phase of Arising	Diet or medicine with hot properties and which on a basis of pre-existing accumulation of the humor of phlegm, cause the imbalance to arise.
	Phase of Pacification	The imbalance of phlegm is pacified through a diet or medications with harsh properties etc..

The nature of the accumulation, arising and pacification

Table B

The Nature of Accumulation	The nature of the accumulation of the three humors (of wind, bile and phlegm in their respective locations) is caused by secondary causes such as diet, behavior, environment and climatic conditions. Accumulation produces a slight modification in the organism as a result of which the person prefers foods and drinks having qualities opposite to those of the accumulated humor. For instance, accumulation of wind induces a preference for heavy and oily foods and drinks that have qualities opposite to those of wind; accumulation of bile induces a preference for cool and blunt foods and, accumulation of phlegm induces a preference for light and harsh foods.
The Nature of Arising	Thus, the arising of humoral imbalances is provoked by the movement of the humor that –as (a result of the pre-existent accumulation-invades/), enters wrong pathways [i.e., locations of other humors]. Such imbalance manifests symptoms detectable in the pulse and in the urine.
The nature of Pacification	Thus, the nature of the pacification of humoral imbalances refers to the reestablishment of the natural condition of balance through which the humors regain their right measure and location. Pacification is characterized by the absence of any manifestation of the disease and is effected means of diet, conduct, medicines and external therapy.

Season of the accumulation, arising and pacification

Table C

Wind	Phase of Accumulation	The season of accumulation is SOKA (May and June). This is the period that culminates in the summer solstice (21 June) in which the penetrating, hot and harsh properties become predominant as the cool, oily and the other lunar property of earth, become minimal. Thus climatic conditions are characterized by properties corresponding to those of wind (light and harsh) and the human organism assumes the same properties. Foods and medicine with bitter, pungent, astringent taste and light, harsh properties etc., become more potent. Therefore, relying on a diet or conduct with light and harsh properties will accumulate the humor of wind. Since this period is characterized by intense heat, wind disorders do not arise.
	Phase of Arising	Season of Summer. The months of July and August are characterized by (in Asia) a slightly fresh climate due to the wind and rains.
	Phase of Pacification	Season of autumn (September and October) are characterized by a predominance of oily and warm property.
Bile	Phase of Accumulation	Season of Summer (July and August) the environment assumes penetrating and oily properties and, at the same time the human organism assumes the characteristics of bile. Foods and medicine with pungent and sour tastes, and hot and penetrating properties become more potent. Therefore, relying on conduct with hot and penetrating properties will accumulate the humor of bile. Since this period is characterized by the coolness of wind and rain, bile disorders do not arise.
	Phase of Arising	Season of autumn (September and October) by a predominance of oily and warm properties.
	Phase of Pacification	Season of begin of winter (November and December) are characterized by a cooling properties.
Phlegm	Phase of Accumulation	Season of last part of winter (January and February) when the climatic conditions are characterized by cold, oily and heavy properties. Since cold is intense in this period, phlegm accumulates, but phlegm disorders do not arise.
	Phase of Arising	Season of spring (March and April) are characterized by an initial increase of temperature.
	Phase of Pacification	Season of SOKA (May and June) are characterized by light and coarse properties opposed to the phlegm's nature.

Manifesting conditions

The manifesting conditions that cause an arising of diseases may be classified into general and specific precipitating conditions. As stated in The Exegetical Treatise the general precipitating conditions consist in the climate of the different seasons of the year (connected to the cycle of the elements), in provocations, in intoxications due to poisoning, in a diet that is not compatible with the elements of one's body, in wrong medications, and in the maturation of negative actions.

The specific manifesting conditions are listed in The Exegetical Treatise.

a) The specific manifesting conditions for wind disorders are as follows:

Excessive intake of bitter, light, or coarse [foods];
exhaustion from sexual activities, inadequate food or sleep,
extreme exertion of body or speech on an
empty stomach; severe loss of blood; severe diarrhea
or vomiting; exposure to cool breezes, exhaustion from
weeping; grief, intense intellectual or verbal activity;
consumption of non-nutritious foods over a long time;
forceful retention or effort [mental and bodily functions
such as urination and defecation etc.

b) The specific manifesting conditions for bile disorders are:

Excessive intake [of foods] with pungent tastes
and penetrating, hot or oily [qualities], experience
of extreme anger, sleeping in the mid-day sun, strenuous
activities after rest, carrying excessive loads, digging in
hard ground, flexing a stiff bow, fighting, Fatigue due to
walking or running, falling from a horse or over a cliff,
Being buried under a landslide or otherwise crushed,
being struck by stones or sticks, Excessive intake of
meat, butter, molasses of cane sugar, alcohol, etc.

c) The manifesting conditions for phlegm disorders are:

Excessive intake of bitter, sweet, heavy, cool and oily
[foods]; resting after a meal; sleeping in the daytime;
lying on humid ground; immersion in cold water;
wearing light and thin clothes; eating freshly picked

wheat or peas, food devoid of fat, or slightly spoiled;
 eating bad meat of goat or tole, animal fat, seed oil;
 eating fat [from boiling bones etc.], rotten foods,
 withered leaf-green leafs; eating raw foods such as
 wild garlic; eating uncooked, burnt or stale food;
 drinking un-boiled goat milk, [unfermented] curd,
 [rotten] buttermilk, cold water or tea [in excess];
 excessive intake of food; fresh intake of food before
 a previous meal has been digested.

3 Inception and Locations of Humoral Disorders

Inception of Diseases

The nutritional essence that has concordant characteristics with that of one of the three humors, spread in the seven constituents by the pervasive wind, gathers in the channels where that humor is located. This begins a process of accumulation of the humor itself, and a type of malfunction takes place in its pathways. The malfunction becomes pathological when it meets secondary causes of diet, behavioral patterns, climate or provocations that are similar in nature to those of the humor accumulated.

This process is illustrated by means of the example of an archer shooting arrows at a target. The archer symbolizes the four secondary causes (diet, behavioral pattern, climatic conditions and provocations). The target is the three humors. The arrows released by the archer, i.e., the instrument through which the aggression takes place, symbolize the (light, harsh, hot, penetrating, etc.) qualities, corresponding to the characteristics of the three humors. This aggression, striking one of the three humors, alters the nature of the bodily constituents and of the impurities directly related to that humor. These factors, aggressed humors, aggressive agents and aggression are related by way of a cause-effect relationship.

Once the humors have become pathological, unhappiness and the pain related to the disease ensue.

Location of Diseases

Concerning the locations of the disorders of the three humors, The Exegetical Treatise provides the following account:

Wind [disorders] are located in the large intestine, hips bones, joints, skin, ears, and especially in the colon.

[Disorders] of bile are located in the small intestine, blood, perspiration, Chyle, lymph, eyes, skin, and especially in the small intestine.

[Disorders of] phlegm are situated in the chest, throat, lungs, head, feces and urine, nose, tongue, and especially in the stomach.

.4 Characteristics of Diseases

Fundamental characteristics of all diseases are increase, decrease and the conflict that may manifest in relation to (a) the three humors, (b) the seven bodily constituents, and (c) the three impurities.

(a) Increase, decrease and the conflict of the three humors

Causes of increase, decrease and the conflict of the three humors

According to The Exegetical Treatise, "The rejection or acceptance of foods and behavioral patterns, lead, respectively, to increase and decrease."

To explain, when one of the three humors is about to increase its normal level, one finds undesirable and rejects the diet or the behavioral pattern that might counteract the increasing tendency of the humor. As a result of this, the humor increases beyond measure.

On the contrary, when one of the three humors is about to fall below its normal level, adopting a diet or behavioral pattern with properties opposed to the humor induces the humoral deficit.

It is, therefore, clear that in the case of the humoral increase, diet and behavior with properties opposite to those of the humoral increase, have a balancing effect; while in the case of the humoral decrease, adopting a diet or behavior with such properties increases the imbalance.

Even though this explanation is not in accord with the commentaries to The Four Treatises on Medicine, it follows closely the words of The Exegetical Treatise.

Symptoms of increase, decrease and conflict of the three humors

Table 1 Wind

Wind	Increase	Thinness, dark complexion, fondness for warmth, shivering, abdominal distension, constipation, loquacity, dizziness, physical weakness, insomnia, impairment of sense perceptions.
	Decrease	Lack of physical energy, little inclination to speak, asthenia, unclear mind (loss of memory and attention) and symptoms resembling those of an excess of phlegm.
	Conflict	Floating pulse that disappears when under pressure; transparent and thin urine, with big bubbles on its surface. Restlessness and anxiety, sighing, dizziness, humming and buzzing sounds in the ears, dry, red and coarse tongue, mental and physical feeling of lightness and disorientation, astringent taste in the mouth, shifting pains, cold shivering and formation of gooseflesh, stiffness of the limbs when stretched or contracted, painful coetaneous sensation as if one's skin was separated from the flesh, sensation as if one's limbs were tightly bandaged, pain as if the eye would fall off, sharp pain when one moves, painful sensation produced by clothes touching one's bodily hair, insomnia, yawning, trembling, a wish to stretch, irritability, get angry without any reason, pain at the hip bones and in the joints, as if one had been beaten, shooting pains in the nape of the neck, in the chest and, temporal bone pain upon pressing the wind points as if a perforation had occurred, unproductive retching, coughing up phlegm in the evening and around dawn, abdominal distension and intestinal rumbling. The above symptoms are aggravated in the evening and around dawn.

Table 2 Bile

Bile	Increase	Yellowing of the stools, urine, skin and eyes, excessive hunger and thirst, rise in the body temperature, insomnia and diarrhea.
	Decrease	Decrease of the metabolic heat and of the body heat, unhealthy and dark complexion.
	Conflict	Emergent, thin and twisted pulse, urine of an orange hue, malodorous and has a lot of vapor. Headache, fever, bitter and sour tastes in the mouth, pale yellow phlegm on the tongue, dry nostrils, whites of the eyes taking on a yellow hue, localize shooting pain, insomnia, tendency to sleep in the daytime, salty and yellow mucus (from the throat), parching thirst, diarrhea or vomit of liquids resembling blood or bile, profuse sweating and malodorous body, consumption of the bodily constituents. The above symptoms are aggravated at noon, midnight and during digestion.

Table 3 Phlegm

Phlegm	Increase	Loss of bodily heat, poor digestion, physical heaviness, pale complexion, lethargy, slackness of the limbs, abundant saliva and mucus, oversleeping, breathing discomfort.
	Decrease	Exhaustion of bodily constituents due to the vanishing of the nutritive essence, dizziness, palpitation, loosening of the joints.
	Conflict	Sunken, weak, and slow pulse; pale urine with little odor or vapor. Sticky mouth, pale tongue and gums, pale eyes, swollen face, abundant mucus (in nose and throat), fogginess in the head, mental and physical heaviness, loss of appetite, poor digestion caused by a decrease of metabolic heat, pain the area of the kidneys and lumbar region, swelling and distension in the entire body, goiter, vomit or diarrhea of undigested foods or with mucus, mental confusion, oversleeping, trembling knees (as the one felt when lighting a weight); swelling and stiffness of the joints, weight increase, inactivity. The above symptoms are aggravated in the cold season, around dusk, the early morning and immediately after meals.

(b) The causes for the increase, decrease and conflict of the seven bodily constituents

The Exegetical Treatise considers the metabolic heat to be the source of the increases or decreases of the bodily constituents:

The metabolic heat resides in its own location, but a portion of it is present in all parts of the body. Its subsiding or flaring up [brings about] increase and decrease (in the bodily constituents). Increase or decrease of the first [bodily constituent] causes each subsequent one to exceed or diminish.

The Words of the Elder explains the above passage in the following way:

Metabolic heat (in the form of digestive bile located in the small intestine) is at the origin of the excess and deficit of the bodily constituents. A portion of the metabolic heat is ,however, present in each of the bodily constituents. The excess or deficit of the metabolic heat of each of the bodily constituents induces, respectively, excess or deficit of the constituents themselves. Excess and deficit of the first bodily constituent [the nutritive essence] causes respectively the excess or deficit of the subsequent ones.

When the heat of the digestive system diminishes, it becomes difficult to digest foods. This causes an excess of the non-assimilated nutritive essence, which in turn leads to a malfunction of the blood and flesh's metabolic heat. Such a malfunction impairs the normal process of self-regeneration of the bodily constituents and has a severe negative effect on the other constituents until the symptoms of the disease manifest from excess. On the contrary, if the digestive heat increases beyond measure, the nutritive essence is, so to speak, dried up and consequently the other constituents too decrease and the symptoms of their deficits arise.

Symptoms of increase, decrease and conflict of the seven bodily constituents

Nutritive Essence	Increase	Decrease of metabolic heat, poor digestion, and other symptoms resembling those that characterize an excess of phlegm.
	Decrease	Loss of weight, difficulty in swallowing food, coarseness of the skin, loud noises in the ears, unbearable shooting pains.
Blood	Increase	Red spots on the face and on other parts of the body, internal abscesses (with a structure like grains of rice), spleen disorders, leprosy, tumors, disorders of blood and bile, jaundice, ailments of the gums, difficulty in moving (the body), reddening of the eyes, urine, and skin.
	Decrease	Slackness and emptiness of the blood vessels, coarseness of the skin, cool bodily sensations and a preference for sour foods.
Flesh	Increase	Goiter, cysts, abundant growth of flesh and softness of the flesh.
	Decrease	Pains in the limb-joints as from trauma, emaciation: skin seemingly adhering to the bones.
Adipose Tissue	Increase	Mental and physical fatigue, growth of fat at the breasts and at the belly.
	Decrease	Insomnia, loss of weight, bluish-gray skin tone.
Bones	Increase	Surplus growth of bones, or teeth.
	Decrease	Loss of hair, teeth or nails.
Marrow	Increase	Physical weakness, [tingling], weak eyesight (difficulty in focusing on visual forms), thickness of the joints.
	Decrease	Hollowness of the bones' cavities due to exhaustion of the marrow, vertigo, formation of cataracts.
Reproductive Fluids	Increase	Seminal calculi that may obstruct the urethra, increase of sexual potency and libido.
	Decrease	Bleeding from the genitals, loss of the libido, burning sensation at the genitals.
Vital Fluids	Decrease	Wasted appearance, fear, physical and mental debility of character, unhappiness.

The vital fluids are the very essence of the vital energy; therefore, their increase is never harmful to the body. However, a deficiency of vital fluids is equivalent to a loss of vital energy. To preserve and develop the vital fluids, one must use medications and foods like fresh warm milk, good quality meat broths, etc., which develop sexual potency.

A deficit of vital fluids is indicated when the reproductive fluids are scarce. Symptoms of a deficit of the vital fluids include:

(a) Symptoms of increase and decrease of the three impurities.

Increase and decrease of the quantity of the three impurities are the direct result of the correspondent alterations of the three humors and of the seven constituents. Accordingly.

The Exegetical Treatise states that the increase and decrease. Are understood respectively by the blockade and profusion of the three impurities.

Symptoms of increase and decrease of the three impurities

Feces	Increase	Physical heaviness, abdominal distension, intestinal pains and rumbling.
	Decrease	Rumbling and movements of wind in the intestine, pain in the ribs and hearth regions resulting from the rising of the wind.
Urine	Increase	Bladder teems (frequent desire to urinate), urogenital pain during urination, frequent urination.
	Decrease	Sudden change in color of the urine, difficulty in urination with emission of small quantity of urine, decrease of the quantity of urine passed.
Perspiration	Increase	Profuse sweating, unpleasant body odor, coetaneous eruptions.
	Decrease	Cracking of the skin, hairs of the body stand up and fall out.

5 Classification of the Diseases

In Tibetan medicine diseases are classified with respect to: 1. causes, 2. sex and age, and 3. features [of the disease].

1. The classification according to causes includes 3 types of diseases, arising from:

- A) The humors of the present life;
- B) Past negative actions;
- C) A combination of both of these.

2. The classification according to sex and age includes five types of disease that afflict:

- A) Males: 17 diseases in total (two of the sperm, six of the testicles, nine of the penis).
- B) Females: 40 diseases in total, 32 main diseases and 8 secondary diseases (5 common diseases, 9 types of tumors, 2 viral diseases, 16 diseases of the white channels or nerves, plus 8 secondary diseases).

C) Children: 24 in total (8 subtle, 8 gross and 8 particular.)

D) The elderly: diseases connected to the physical decay due to aging.

E) All individuals regardless of sex and age. It has classification of the 404 diseases that afflict all, regardless of sex and age.

(1) According to humoral disorders: in total 101 diseases (42 of wind, 26 of bile and 32 of phlegm).

(2) According to location: in total 101 diseases (A. 2 mental illnesses, B. 99 physical illnesses; 18 disorders of the upper part of the body, 5 disorders of the lower part of the body, 19 disorders of the outer part of the body, 20 disorders of the inner part of the body, 37 disorders of the outer and inner parts of the body.)

(3) According to typology; in total 101 diseases (48 internal, 15 lesions, 19 fevers and 19 miscellaneous disorders). (4) According to principal humoral disorders: in total 101 diseases (A. 74 disturbances, B. 27 additional diseases).

Meaning of symbols of the following tables

Symbol of increase + great increase ++ extreme increase +++

Symbol of decrease - great decrease -- extreme decrease ---

Symbol of conflict x

Symbol of two equal increase =+

Symbol of two equal decrease = -

74 disturbances

18 pathologies: increase and decrease of one individual humor in relation to three different levels of relation to three different levels of seriousness of the imbalance.

Increase	Wind	+	++	+++
	Bile	+	++	+++
	Phlegm	+	++	+++
Decrease	Wind	-	- -	- - -
	Bile	-	- -	- - -
	Phlegm	-	- -	- - -

18 pathologies: increase and decrease of 2 humors in relation to equal or different levels of seriousness of their alteration.

2 humors in relation to equal

Equal increase	wind & bile = +	wind & phlegm = +	bile & phlegm = +
Equal decrease	wind & bile = -	wind & phlegm = -	bile & phlegm = -

2 humors in relation to different levels

Increase together	wind ++ bile +++	wind ++ phlegm +++
	bile ++ phlegm +++	bile ++ wind +++
	phlegm ++ wind +++	phlegm ++ bile +++
Decrease together	wind -- bile ---	wind -- phlegm ---
	bile -- phlegm ---	bile -- wind ---
	phlegm -- wind ---	phlegm -- bile ---

38 pathologies: increase, decrease and conflict to 3 humors together

14 types of increase and decrease of the three humors

Equal of the three humors

Equal increase	wind, bile and phlegm = +
Equal decrease	wind, bile and phlegm = -

2 humors in relation to different levels

Increase together	wind ++ bile +++	wind ++ phlegm +++
	bile ++ phlegm +++	bile ++ wind +++
	phlegm ++ wind +++	phlegm ++ bile +++
Decrease together	wind -- bile ---	wind -- phlegm ---
	bile -- phlegm ---	bile -- wind ---
	phlegm -- wind ---	phlegm -- bile ---

38 pathologies: increase, decrease and conflict to 3 humors together

14 types of increase and decrease of the three humors

Equal of the three humors

Equal increase	wind, bile and phlegm = +
Equal decrease	wind, bile and phlegm = -

Different levels of the three humors

Different increase	wind +++ bile ++ phlegm +
	bile +++ phlegm ++ wind +
	phlegm +++ wind ++ bile +
	phlegm +++ bile ++ wind +
	bile +++ wind ++ phlegm +
	wind +++ phlegm ++ bile +
Different decrease	wind --- bile -- phlegm -
	bile --- phlegm -- wind -
	phlegm --- wind -- bile -
	phlegm --- bile -- wind -
	bile --- wind -- phlegm -
	wind --- phlegm -- bile -

6 different states of three humors

Different state of three humors together	wind x bile + phlegm -
Different state of three humors together	bile x phlegm + wind -
Different state of three humors together	phlegm x wind + bile -
Different state of three humors together	phlegm x bile + wind -
Different state of three humors together	bile x wind + phlegm -
Different state of three humors together	wind x phlegm + bile -

6 increase and decrease of three humors together

Three humors together	wind - bile & phlegm +
Three humors together	bile - phlegm & wind +
Three humors together	phlegm - wind & bile +
Three humors together	wind + bile & phlegm -
Three humors together	bile + phlegm & wind -
Three humors together	phlegm + wind & bile -

12 increase and decrease particular table

Different level of Increase	wind & bile = + phlegm	+++
	phlegm & bile = + wind	+++
	phlegm & wind = + bile	+++
	wind + phlegm & bile	+++
	bile + phlegm & wind	+++
	phlegm + wind & bile	+++
Different level of decrease	wind & bile = - phlegm	- - -
	phlegm & bile = - wind	- - -
	phlegm & wind = - bile	- - -
	wind - phlegm & bile	- - -
	bile - phlegm & wind	- - -
	phlegm - wind & bile	- - -

B. 27 additional diseases

Invasive 9 disturbances

Wind	Altered wind's locations invaded by bile disorders
	Altered wind's locations invaded by phlegm disorders
	Altered wind's locations invaded by disorders of 3 humors
Bile	Altered bile's locations invaded by wind disorders
	Altered bile's locations invaded by phlegm disorders
	Altered bile's locations invaded by disorders of 3 humors
Phlegm	Altered phlegm's locations invaded by bile disorders
	Altered phlegm's locations invaded by wind disorders
	Altered phlegm's locations invaded by disorders of 3 humors

9 Arising disturbances

Wind	Bile disorder arising during wind disease.
	Phlegm disorder arising during wind disease.
	Bile and phlegm disorder arising during wind disease.
Bile	Wind disorder arising during bile disease,
	Phlegm disorder arising during bile disease,
	Wind and phlegm disorder arising during bile disease,
Phlegm	Wind disorder arising during phlegm disease,
	Bile disorder arising during phlegm disease,
	Wind and bile disorder arising during phlegm disease.

9 Reacting disturbances

Wind	Wind disease localized in its own place causes Bile and Phlegm disorders.
	Wind disease when it invades bile locations causes Phlegm disorders,
	Wind disease when it invades phlegm locations causes Bile disorders,
Bile	Bile disease localized in its own place causes Wind and Phlegm disorders,
	Bile disease when it invades wind locations causes Phlegm disorders,
	Bile disease when it invades phlegm locations causes Wind disorders,
Phlegm	Phlegm diseases localized in its own place causes Wind and Bile disorders
	Phlegm diseases when it invades wind locations causes Bile disorder,
	Phlegm diseases when it invades bile locations causes Wind disorder.

Last, each of the 404 diseases just mentioned is multiplied by four for a total of 1616 different pathologies:

404 disorders influenced by past negative actions [which prove fatal despite treatment]; 404 disorders caused by "provocations" imputed by the mind [which are cured by medications and rituals]; 404 real disorders caused by the humors of this life [which prove fatal if not treated]; 404 apparent disorders caused by temporary conditions [from which one recovers naturally].

The classification according to the features of the disease

It includes an immense and undetermined number of diseases. The Exegetical Treatise states that all the different features of diseases are numberless.

Since, in relation to the twenty-five bases of aggression, there develop numerous [diseases of] single, dual and triple type; their number and name are not specified. However, they are all disorders of the three humors, and there are no locations of disease other than the ten bases of aggression.

Wherever birds may [wish to] fly, there is no place for them to fly other than the sky. Similarly, since phlegm is cold, and bile and blood are hot, despite how numerous their typologies may be, all diseases are included in the two [categories of] hot and cold.

The twenty-five bases of aggression referred to by The Treatise consist of five types of wind, five types of bile and five types of phlegm, seven bodily constituents and three impurities. The aggressive agents are represented by

single and complex humoral imbalances. Each of these imbalances, associated with additional disturbances, form a picture of countless illnesses whose number and names are difficult to specify. Concerning this, The Words of the Elder says that.

The term "numberless" refers to a number with sixty zeros. These truthful words, based on the unique knowledge of the ancient sages of the Land of Snow, gained through the deductive logic of the four elements that elucidates the formation of the human body and the nature of the bodily functions. Spoken by a simple person, are free from the arrogance of using Buddhism as a support and the violence of implying the origin of this healing art as being either China or India and not the precious treasure stored by our forefathers. A few old stubborn ones will criticize me for this book, but the young intelligent ones may praise it; praise and blame apart, I have written this book with a good intention; may the good causes planted by writing it give relief to the suffering of all and bestow on them the well being of body and mind, and become the seed for eternal happiness.

Chapter XI

Properties of Foods and Medicines

1 Source of the Properties of Foods and Medicines

Introduction

In Tibetan medicine, all food and medicinal plants have their origin in the four elements (*earth, water, fire, air and space*). They are therefore classified according to certain characteristics, associated with a particular element. Classification is based upon these characteristics, which can range from intrinsic properties, such as moisture, to the taste of a given food or plant. To classify by element, the nature of a given plant is also analyzed according to its initial "seed": its initial "constitutive elements." It is important to remember the distinction between the two uses of the term element. As a tool for classification, the constitutive elements are the lowest common denominators into which a substance can be divided, basically, its essential element. They show the original preponderance of one element—such as water—over another, and determine the final classification of a whole plant as belonging to one or another element.

The Elements

All matter is made up of the earth element. The water element confers humidity and cohesiveness. The fire element produces warmth and ripening. The air element creates the stimuli for growth by virtue of its dynamic quality. Space refers to the absence, the void of matter. Space is indispensable, in that without the void no new phenomena can be born or grow. For this reason and in this context, space is considered to be a condition for arising and growth.

In *The Exegetical Treatise* it states that "the coupling of earth and water, of fire and earth, of water and fire, of water and air, of fire and air, of earth and air, produce the six tastes." This means that the preponderance of two elements in a certain food or in a medicinal plant determines one of the six different tastes. The preponderance of the earth and water element results in the sweet taste; the preponderance of fire and earth in the sour taste; the preponderance of water and fire in the salty taste; the preponderance of water

and air in the bitter taste; the preponderance of fire and air in the pungent taste and; the preponderance of earth and air results in the astringent taste.

(1) Medicinal plants or foods which are mainly of the earth element have heavy, stable, blunt, smooth, oily, and dry potencies. Their function ensures the health of the seven bodily constituents and strengthens them. They also prevent the dispersal of the power of sense perception, and the general alleviation of wind and humoral imbalances. (2) Medicinal plants which are mainly of the water element have liquid, cool, heavy, blunt, oily, smooth and pliant potencies. Their function confers the necessary moisture to the seven bodily constituents, lubricating and giving to them cohesion. This in general alleviates bile humoral imbalances. (3) Medicinal plants of the fire element have hot, sharp, dry, rough, light, oily, and mobile potencies. Their function produces metabolic heat, develops and regenerates the seven bodily constituents, and gives the skin a good complexion. In general, they alleviate phlegm humoral imbalances. (4) Medicinal plants of the air element have light, mobile, cold, rough, lean and dry potencies. Their function is to give the body solidity, govern bodily movement and convey the nutritive essence of foods all over the body. In general, they alleviate combined humoral imbalances of phlegm and bile. (5) The empty quality of space is part of each and every medicinal plant and its function creates openness, and in general, alleviates disturbances of the three humors together.

Table 1:

The Table of 6 tastes					
Sweet	Sour	Salty	Bitter	Pungent	Astringent

Table 2:

The Table of 3 tastes in the digestive process		
Sweet	Sour	Bitter

Table 3:

The Table of 8 potencies							
Heavy	Oily	Cold	Blunt	Light	Rough	Hot	Sharp

Table 4:

The table of 17 characteristics of potencies								
Substances	Heavy	Oily	Cold	Blunt	Light	Rough	Hot	Sharp
Attributed	Stable	Smooth	Cool	Pliant	Mobile	dry/lean	Warm	Liquid

Table 5: The 4 elements and numbers indicating their potency

4 Elements	Earth	Water	Fire	Air
<i>The 17 characteristics of potencies</i>	Heavy 6	Liquid 7	Hot 7	Light 6
	Stable 5	Cold 6	Sharp 6	Mobile 5
	Blunt 4	Heavy 5	Dry 5	Cold 4
	Smooth 3	Blunt 4	Rough 4	Rough 3
	Oily 2	Oily 3	Light 3	Lean 2
	Dry 1	Smooth 2	Oily 2	Dry 1
		Pliant 1	Mobile 1	

Table 6: The 20 characteristics of the three humors

3 Humors	Wind (Lung)	Bile (Tripa)	Phlegm (Beken)
<i>The 20 characteristics of potencies</i>	Rough 6	Oily 7	Oily 7
	Light 5	Sharp 6	Cold 6
	Cool 4	Hot 5	Heavy 5
	Subtle 3	Light 4	Blunt 4
	Hard 2	Smelly 3	Smooth 3
	Mobile 1	Purgative 2	Stable 2
		Moist 1	Slimy 1

Table 7: The 17 Potency of Medicines that Conquer the 20 Characteristics of the Three Humors

Wind		Bile		Phlegm	
<i>Potencies to remedy Wind imbalance</i>	<i>Characteristics of the Wind humor</i>	<i>Potencies to remedy Bile imbalance</i>	<i>Characteristics of the Bile humor</i>	<i>Potencies to remedy Phlegm imbalance</i>	<i>Characteristics of the Phlegm humor</i>
Smooth	Rough	Lean	Oily	Lean	Oily
Heavy	Light	Blunt	Sharp	Hot	Cold
Warming	Cool	Cold	Hot	Light	heavy
Oily	Subtle	Heavy	Light	Sharp	Blunt
Oily	Hard	Liquid	Smelly	Mobile	Stable
Stable	Mobile	Dry	Purgative	Rough	Smooth
		Dry	Moist	Rough	slimy

Table 8: Pema Karpo's Functions of the 17 potencies, with examples:

Wind (Lung)		
<i>Humoral nature</i>	<i>Remedial potencies</i>	<i>Example</i>
Rough	Smooth	Moonseed, blackberry, rice soup, toasted barley soup
Light	Heavy	Natural halite, molasses, bones aged, barley dough balls,
Cool	Warm	Nettle, sheep meat.
Subtle, Hard	Oily	Butter, sesame oil, marrow, fat.
Mobile	Stable	Nutmeg, garlic, radish.

Bile (Tripa)		
<i>Humoral nature</i>	<i>Remedial potencies</i>	<i>Example</i>
Oily	Lean	Tsampa soup, millet soup, hot water.
Sharp	Blunt	Bamboo pith, poppy, rhodiola, white and red aconite.
Hot	Cold	Camphor, sandalwood, bezoar, chirata, picrorrhiza.
Light	Pliant	Fresh butter, cold water, tea, cow milk, yogurt, dandelion.
Smelly	Liquid	All herbal purgatives
Purgative Moist	Dry	Husked grain

Phlegm (Beken)		
<i>Humoral nature</i>	<i>Remedial potencies</i>	<i>Example</i>
Oily	Lean	Pea, small peas, limestone.(chong xhi)
Cold	Hot	Pepper, capsicum, ginger, asafetida.
Heavy	Light	Sichuan pepper, freshly toasted barley soup, boiled water ¹
Blunt	Sharp	Ammoniac salt, barley ale, aconite, anemone, buttercup, clematis
Smooth Slimy	Rough	Hippophae rhamnoides L., detoxified limestone, fish, Pork
Stable	Mobile	All emetics

In short, each element has its own characteristics and each one has specific therapeutic functions. Everything on our earth can be used as a medicine. Even aconite and other poisonous or toxic substances, when mixed with other medicinal ingredients and when detoxified, can become effective medicines. The chapter on *The Intrinsic Properties of Single Ingredients* in *The Exegetical Treatise* illustrates the properties of the eight metals, eight minerals, etc. It states as follows:

Gold gives long life, slows down the aging process
And cures toxicity caused by metals and minerals.
Silver cures lymphatic diseases, dries pus and
Purifies blood.

Naturally, these properties refer to curative functions once these substances have undergone a detoxification process.

Tibetan medical texts assert that gold, silver and other metals and minerals contain heavy and corrosive toxic substances harmful to the human body. However, these metals, if detoxified, become very powerful. For example, Tibetan medical texts recognize mercury as poison that can kill a person, but explain that the nature and property of metal is transformed when mercury is fully freed from toxic agents through a complex process of purification. The fire and air elements and the nature of mercury become light, conquering its toxic, heavy, and corrosive nature linked to the earth and water

¹ Some doctors, state these ingredients cannot overcome the heavy quality of phlegm, and the light remedial quality for the heavy nature of phlegm refers to the light quality of a prolonged application of a good diet, behavior, medicine and external therapy.

element. This transformation is indicated by the fact that ashes of mercury float in water without sinking. Ingestion of a mere gram of raw mercury can cause death. However, once purified and made into ash, a mere gram becomes an extraordinary medicine: it can give back good health to a sick person, restore the perceptive faculties and, give virility, etc. The practice of medicine in Tibet has given, in the course of the centuries, numerous clinical proofs of these effects. The qualities or potency inherent in a specific medicinal ingredient often refers to the sensation that it produces. For instance, if we hold half a pound each of mercury in one hand and of cotton in the other, one feels the difference of weight between the two hands; there is a heavy sensation from mercury but not from cotton.

Illnesses of phlegm are characterized by the cold nature of the earth and water element. The dynamics of these elements is such that they can shift from the upper to the lower part of the body. When this occurs, we use medicines of the element fire and also of air. These medicines cause the potency of the earth and water elements to shift back to their natural location, i.e., the upper part of the body, thus, alleviating and bringing about recovery from the illness.

Illnesses of a hot nature are characterized by the fire and wind element. The dynamics of these elements is such that they can shift from the lower to the upper part of the body. When this occurs, we use medicines that are predominantly of the earth and water elements. These medicines cause the potency of the fire element to shift back to its original location, alleviating and bringing about recovery from the illness. According to this principle of the dynamics of the elements, most purgatives have a sweet taste resulting from the combination of the earth and water elements whose potency tends to shift downward.

2 Identification of the Six Tastes

The six tastes are sweet, sour, salty, bitter, pungent and astringent. Of the six, the sweet taste has the most marked healing property. The others in the order in which they have been stated have healing properties that are progressively weaker. Thus, the astringent taste has the weakest healing property. Taste is defined as the result of the "gustatory" or palatal experience produced by the meeting of a certain element and the tongue. The sweet taste is the flavor that stays a long time on the palate and is pleasant and inspires

the desire to taste it again. The sour taste is the flavor that causes teeth to clench, facial muscles to contract and initiates abundant salivation. The salty taste is the flavor that produces the sensation of saltiness and produces salivation. The bitter taste is the flavor that cleanses bad smells from the mouth, and counteracts the urge to vomit. The pungent taste is the flavor that burns the tongue and causes tears as soon as it comes in contact with the mouth. The astringent taste is the flavor that causes a rough sensation, felt for a long time under the tongue and on the palate.

3 Examples of Six Tastes

Examples of Some Single Tastes

The sweet taste is exemplified in the following plant medicines and food:

Table of the Sweet Parts

Name	Tibetan name	Tibetan	Picture	No.
Liquorice	shing-mngar	ཤིང་མངར	309	
Grape	rgun-'brum	རྒྱུན་འབྲུམ		
Bamboo pith	cu-gang	ཐུག་ང	193	
Saffron	gur-gum	གུར་གུམ	189	
Cassia fistula	dong-ga	དང་ག	256	
Solomon seal	ra-mnye	ར་མཉེ	621	
Asparagus	nye-shing	ཉེ་ཤིང	411	
Angelica	lca-wa	ལྷ་བ	395	
Sugar	ka-ra	ཀ་ར		
Molasses of sugarcane	bu-ram	བུ་རམ		
Honey	sbramg-rtsi	སྤྲུང་རྩི		
Meat	Sha	ཤ		
Butter	mar	མར		

The sour taste is found in the following plants and food:

Table of Sour Tastes

Names	Tibetan name	Tibetan	picture No.
Pomegranate	se-'bru	སེའབྲུ	315
Sea buckthorn	stsr-bu	སྤར་བུ	245-247
Bengal quince	bse-yab	བསེཡབ	316
Embolic phyllanthus	skyu-ru	སྐུ་རུ	211
Juniper berry	rgya-shug-tsig-gu	རྒྱ་ཤུག་ཚིག་གུ	229
Rhus semialata	da-trig	དཀྱིག	249
Yogurt	Zho	ཞོ	
Barley ale	Chng	ཅང	
Sour milk	'o-tsab	འོ་ཅུབས	

The salty taste is found in the following ingredients

Table of Salty Tastes

Names	Tibetan name	Tibetan	Picture No.
Sallucidum	rgyam-tshva	རྒྱལ་མཁའ་	171
Salt ammoniac	rgya-tshva	རྒྱལ་མཁའ་	170
Halitum (red alum salt)	lce-myong-tshva	ལེ་མཚོ་མཁའ་	172
Salt from animal horns	rva-tshva	རུ་མཁའ་	
Violet halite	kha-ru-tshva	ཁ་རུ་མཁའ་	169
Common salt	tsabs-ru-tshva	ཅེབས་རུ་མཁའ་	
Nitrum (saltpeter)	ze-tshva	ཇེ་མཁའ་	182
Iodine salt	lba-tshva	ལཱ་མཁའ་	178
Glauber's salt	mze-tshva	མཛེ་མཁའ་	181
Salt derived from wood ash	tha-tshva	ཐ་མཁའ་	
Cinnamon	shing-tshva	ཤིང་མཁའ་	310
Actual saltpeter	ya-bksha-ra	ཡ་བཀྲ་ཤ་ར་	183
Trona	bul-tog	བུ་ལ་ཏོག	177

The bitter taste is found in the following ingredients:

Table of the Bitter Tastes

Names	Tibetan name	Tibetan	Picture No.
Chinaberry	nim-pa	ནིམ་པ་	260
Swertia chirata	tig-ta	ཏིག་ཏ་	420
White aconite	bong-dkar	བོང་དཀར་	514
Lagotis Picrorhiza	hong-len	ཧོང་ལེན་	703
Herpetospermum pedunculatum	gser-gyi-me- tog	གསེར་གྱི་མེ་རྩ་ག་	679
Holarrhena antidysenterica	dug-mo-nyung	དུག་མོ་ཡུང་	455
Musk	gla-rtsi	གླ་རུ་མི་	192
Gall bladder liquid	mkhis-pa	མཁིས་པ་	
Barberry	skyer-pa	སྐུར་པ་	213
Corydalis impatiens	ba-sha-ka	བ་ཤ་ཀ་	271
Rocks exudation	brag-zhun	བྲག་འཕྱུར་	197
Gentiana	kyi-lce	ཀྱི་ལེ་	339/ 340
Corydalis hendersonia	re-kon	རེ་ཀོན་	638

The pungent taste is exemplified by: .

Table of Pungent Tastes

Names	Tibetan name	Tibetan	Picture No.
Black pepper	na-le-sham	ན་ལེ་ཤམ་	258
Ginger	bc'-sga	བཅའ་སྒྲི	381
Long pepper	pi-pi-ling	ཕི་ཕི་ལིང་	261
Fresh ginger	sge'u-gsher	སྒེ་ཡུ་གཤེར་	382
Asafoetida	shing-kun	ཤིང་ཀུན་	308
Anemone	srub-ka	སྒུབ་ཀ་	693
Buttercup	lce-tsha	ལྷེ་ཙ་	387
Arisaema typhonium	dva-ba	དུ་བ་	452
Onion	Btsong	བཙོང་	571
Garlic	sgog-skya	སྒོག་སྒྱུ་	392

The astringent taste is exemplified by the following ingredients:

Table of the Astringent Tastes

Names	Tibetan name	Tibetan	Picture No.
White sandalwood	tsan-dan-dkar-po	ཙན་དན་དཀར་པོ་	287
Red sandalwood	tsan-dan-dmar-po	ཙན་དན་དམར་པོ་	288
Terminalla chehula	a-ru-ra	ཨ་རུ་ར་	327-332
Terminalia bellerica	ba-ru-ra	བ་རུ་ར་	268/ 269
Blue poppy	autpal-sngon-po	ཨུཏཔལ་སྒོན་པོ་	718
Bergenia	li-ga-dur	ལི་ག་དུར་	357/ 358
Spiraea schneideriana	Smag	སྤྲལ་	284/ 285
Quercus semicarpifo Lia	mon-cha-ra	མོན་ཇ་ར་	282/ 283
Garmanica tamarisk	'om-bu	འོམ་བུ་	301

Examples of Multiple Tastes

Multiple tastes originate from the combination of the six basic tastes. As examples of medicinal ingredients with multiple tastes *The Exegetical Treatise* states that "Borneo camphor 67, rhoum pumilum Maxim 68, among others."

These substances have different tastes. Camphor has four different tastes, i.e. bitter, very pungent, and at the same time astringent. The rhoum pumilum Maxim has three tastes: sour, sweet and astringent. Other examples of substances with more flavors include barley ale, which has a sweet, sour and bitter taste. Medicinal ingredients and other things that have more than one taste possess the properties of all of the tastes, but may combine in particular ways.

There are 36 double tastes, determined by the hint of the sweet of the sweet, sour of the sweet, salty of the sweet, bitter of the sweet, pungent of the sweet, and astringent of the sweet. Then sweet of the sour, sour of the sour, etc. ($6 \times 6 = 36$)

There are 216 threefold tastes, i.e. $36 \times 6 = 216$.

There are 1296 fourfold tastes, i.e. $216 \times 6 = 1296$.

There are 7776 fivefold tastes, i.e. $1296 \times 6 = 7776$.

There are 46656 six-fold tastes, i.e. $7776 \times 6 = 46656$.

Analyzing the properties of ingredients with such tastes (and their further subdivisions) one can discover numberless new remedies.

4 Function of Tastes

The Exegetical Treatise explains the use of tastes in greater detail as follows:

Sweet, sour, salty and pungent tastes cure wind
[imbalance]. Bitter, sweet, and astringent cure
bile [imbalance]. Pungent, sour and salty cure
phlegm [imbalance].

Moreover, in the Bon treatise called *Menbum Karpo*, we read that "pungent, sour and salty tastes remove imbalances of phlegm and wind." Thus, the sweet taste that has the property to cure wind and bile imbalances, yet increases phlegm. Similarly, the sour taste that cures imbalances of wind and phlegm increases bile. The salty taste cures wind and phlegm imbalances, but contributes to the increase of bile. The bitter taste cures bile imbalances but increases wind and phlegm. The pungent taste cures wind and phlegm

imbalances, but increases bile. The astringent taste cures bile imbalance, but increases wind.

The Exegetical Treatise states that the pungent taste cures wind imbalances because the fire element which is the basis of the pungent taste has a hot potency. In reality, the main potencies that manifest with the encounter of fire and wind elements in the pungent tastes (light, rough, penetrating, lean and dry) do not alleviate wind disorders, but on the contrary exacerbate them. Each taste has its specific curative properties, but excessive intake (of foods or herbal medicines) with a certain taste can cause unwanted consequences. Now let us see the properties and unwanted consequences of the six basic tastes.

Sweet taste stimulates the appetite and increases physical energy and the bodily constituents; it is suitable to the elderly and people of poor constitution and to children. It helps the functions and energy of larynx and lungs; develops bodily tissue, heals wounds, gives a radiant complexion, a good hue to the hair, improves the sense power, extends the duration of the life, cures intoxication and poisoning and, in general cures the imbalances of wind and bile.

Excessive intake of sweet food increases phlegm and fatty tissue, weakens metabolic heat (beginning from the digestive heat), causes obesity, makes the urine taste sweet, causes frequent urination, causes goiter and illnesses resulting from the malfunction of the glandular system.

Sour taste develops digestive and metabolic heat; stimulates appetite, satiates; decomposes and confers liquidity to ingested foods, helps in the digestive process; cleans the bodily channels from obstructions caused by thick phlegm; produces a sensation of freshness; it clears blocked channels and favors the wind's flow throughout.

Excessive intake of sour foods contributes to the arising of blood and bile disorders; causes the slackening and softness of the bodily tissues, diminishes the senses and perceptive power; causes dizziness, and the edema 69; edema of swelling 70; can cause erysipelas 71, eruptions 72, and pimples; illnesses associated to an excessive thirst and, infectious and contagious diseases.

Salty taste removes illnesses that cause stiffness or difficulty of movement; cures constipation and blockage of the urine; removes obstructions to the bodily channels; causes perspiration when hot salt compresses is applied to the body; increases metabolic heat and stimulates appetite.

Unwanted consequences of an excessive intake of salty food include the following: causes withering and loss of hair and bodily hair, increases wrinkles, diminishes the strength of the bodily constituents, stimulates the desire to drink, contributes to the onset of illnesses such as leprosy, red skin spots and blood disorders.

Bitter taste cures illnesses accompanied by loss of appetite, stimulates thirst; alleviates poisoning, viral diseases; healing of leprosy and diseases accompanied by fainting; cures infectious and contagious diseases accompanied by serious diarrhea and vomiting; bile disturbances; reduces the excess of the substances that, in the digestive tract, decompose foods [and the substances that purify the bodily constituents], reduces the excess of fatty, muscular and of marrow tissue; reduces the excess of urine and feces, helps to relax and, contributes to healing of woman's breast problems and hoarseness.

Excessive intake of bitter foods causes the exhaustion of the bodily constituents, and the imbalance of the humors of wind and phlegm.

Pungent taste heals glottis problems, swelling of the tongue; helps in curing leprosy and anemia accompanied by swelling; heals ulcers and wounds; increases heat and eases digestion; stimulates appetite; reduces the excess of fatty tissue and of the liquids that break down foods; has a purgative effect and cleans the cavities of channels.

Excessive intake of pungent foods causes exhaustion of the reproductive fluids and of the bodily constituents which result from bending of the body and symptoms such as trembling; pains in the back and at the hips, and fainting.

Astringent taste reduces excess of blood, bile, fatty tissue and of the substances that break down food; heals ulcers and wounds, gives tone to fatty tissue and a good skin complexion.

Excessive of intake of astringent food causes increases of thick phlegm, reduces feces and abdominal distension; contributes to heart problems; greatly reduces the substances that break down foods and obstruct channels.

5 Peculiar Properties of Certain Tastes

Sweet foods and medicinal herbs are indicated for wind and phlegm, but contraindicated for phlegm. There are, however, exceptions such as old barley, meat of animals that live in dry areas, wild or domestic yak meat, fish, sheep meat and honey. These foods, though sweet, are indicated in phlegm problems.

Sour foods and herbs are indicated for wind and phlegm, but not indicated for bile problems. There are, however, exceptions such as Embolic Phyllanthus which has the property to cure blood, bile and other disorders of a hot nature.

Salty foods and herbs are indicated for wind and phlegm, but not indicated for bile problems. There are, however, exceptions such as Halitum and Sallucidum which are indicated in bile problems. Owing to their heavy potency, excess in the intake of these salts contributes to phlegm disorders.

Bitter foods and herbs are indicated for bile, but not indicated for phlegm and wind problems. There are, however, exceptions such as the Caesalpinia crsta 73, and Tinospora sinensis 74, (moonseed) that have the property to cure phlegm and wind imbalances.

Pungent foods and herbs are indicated for wind and phlegm, but not indicated for bile problems. There are, however, exceptions such as garlic and long pepper, which alleviate bile problems. The potency of these pungent substances is rough and light; hence excess in the intake of these spices can contribute slightly to wind imbalance.

Astringent foods and herbs are indicated for bile, but not indicated for phlegm and wind problems. There are, however, exceptions such as Terminalla chehula and Terminalia bellerica, which are indicated also for phlegm and wind problems.

6 Tastes in the Three Phases of Digestion

The Exegetical Treatises gives the following general description of the transformation of tastes in the digestive process:

As [foods] meets the stomach's digestive heat, and are gradually digested by phlegm, bile and wind; sweet and salty foods assume a sweet taste; sour foods retain their sour tastes, bitter, pungent and astringent foods become bitter.

The tastes that foods and drinks assume in the digestive process are many, given by the many combined tastes, mentioned above. However, only three (*sweet, sour and bitter*) are decisive for the production of the three humors in the physiological condition. Sweet taste increases phlegm, sour taste increases bile and, bitter taste increases the wind humor.

The transformation of tastes and potencies that occur in the digestive process is the result of the interaction of the four elements constitutive of all matter. Such transformation is effected by the meeting of the four elements of

foods with the four elements of the three humors, which regulate the digestive process: First, you have to remember that the nature of "decomposing phlegm" is earth and water elements, the nature of "digestive bile" is fire element, the nature of "fire accompanying wind" is wind element. Then from the interaction occurring in the digestive tract between elements of taste and elements of the humors depends the increase or decrease of the foods potency. These transformations can be inferred based on the interaction between elements called mother-son, friend-enemy.

Sweet taste (earth-water): In the first phase of digestion, the earth and water elements of sweet foods join the corresponding elements of the decomposing phlegm. Thus, the sweet taste remains unchanged (*because of its identical nature*).

In the second phase of digestion, meeting the digestive bile's fire neutralizes the earth element's potency (*which is the son of fire*). Moreover, in this phase of the digestive process, the water element of the sweet taste (*though inimical to fire*) is neutralized by the pervading potency of the fire element. Thus, at this stage the food's taste is unclear.

Finally, in the third phase of digestion, the air element of the fire-accompanying wind prevents the water element (*of the sweet taste already neutralized and reduced to a mere potential*) to manifest. The potency of the earth element is dispersed by the potency of the air elements. Thus, also at this stage the food's taste remains unclear as before.

Sour taste (fire-earth): In the first phase of the digestion, the potency of the sour food's fire element is neutralized by the earth and water elements of phlegm. The taste of food at this stage becomes slightly sweet.

However, the original sour taste manifests in the second phase of the digestion when a food meets the digestive bile. The latent potency of the fire element awakens and together with that of earth (*which remained unchanged*) produces again the sour taste that characterizes sour foods.

In the third phase of the digestion, the fire accompanying wind disperses the potency of the earth element. The potency of the fire element (*left without its support, the earth*) weakens and, food takes on an unclear taste.

Salty taste (water-fire): In the first phase of the digestion, the water element of the decomposing phlegm neutralizes the potency of the fire element. The water element of the salty taste joins the water of the phlegm element; thus, food assumes a sweet taste.

In the second phase of the digestion, though the water element is inimical to fire, its potency is neutralized by the bile's fire element being stronger by virtue of being in its natural location. The fire element of the salty taste

joins to the bile's fire, but left alone its incapability of determining a specific taste.

In the conclusive phase of the digestion, the water element, neutralized by the digestive bile's fire, remains inactive, while the potency of the fire and wind elements increases, hence food assumes a slightly pungent taste.

Bitter taste (*water-air*): In the first phase of the digestion, the water element unites with the water of the decomposing phlegm. Its strengthened potency weakens the air element and the taste of bitter food becomes unclear.

In the second phase of the digestion, fire neutralizes the water's potency, while the air element's potency is just a "seed;" thus, at this stage the taste remains indefinite.

In the third phase of the digestion, the air element meeting the fire-accompanying wind awakens, become active by associating with the potency of the water element, and gives a bitter taste to the food.

Pungent taste (*fire-air*): In the first phase of the digestion, the water and earth element of the decomposing phlegm neutralizes the potency of the fire element. The potency of the air element, meeting with the earth element (*its enemy*) and water (*its friend*) is also neutralized; hence the food taste does not take on a definite character.

In the second phase of the digestion, the potency of the fire element meets the digestive bile's fire and reawakens. The potency ensuing from fire meeting fire is excessive, and as a result of this, fire neutralizes the air's potency. Such foods do not assume a definite taste.

In the third phase of the digestion, the air element reawakens by meeting the fire-accompanying wind; its potency joined up with that of fire (*activated by the meeting of air-wind*) gives a bitter taste to the food.

Astringent taste (*earth-air*): In the first phase of the digestion, the earth element joins up with the earth element of phlegm. The strengthened potency of the earth element neutralizes the potency of the air element and taste remains unclear.

In the second phase of digestion, because the interaction between the earth and air elements and the bile's fire is of the mother-son type, the potency of both elements is neutralized and the food again does not develop a clear taste.

In the third phase of the digestion, the air element uniting with the fire-accompanying wind disperses the potency of the earth element. Through the power of the digestive bile both the potency of the fire and air elements

have increased, so it can be inferred that at this stage food assumes a pungent taste.

Even though in the third phase of the digestive process the taste of food can be bitter or pungent, a different taste is associated to each of the three digestive phases.

Since the elements and the property of foods produce tastes and herbs come from the potency of their constitutive elements, the digestive taste and property should accord with the original taste. But, since foods or herbs have intrinsic potency determined by a different preponderance of elements, such potencies and digestive tastes do not always accord with their original taste. Many indeed are the medicinal herbs whose intrinsic potency is their predominant potency. For instance in *The Words of the Elder* we read the following account:

- (1) Some sweet foods and herbs become sour in the digestive tract and increase phlegm and bile.
- (2) Some astringent food and herbs in the digestive tract become pungent and have a cold potency.
- (3) Some sweet foods and herbs in the digestive tract become pungent and increase phlegm and bile.
- (4) Some sweet foods and herbs in the digestive tract become pungent and have a cold potency
- (5) Some pungent foods and herbs in the digestive tract maintain the same taste and cause a growth of all three humors.
- (6) Some salty foods and herbs in the digestive tract become pungent and increase heat.
- (7) Some salty foods and herbs in the digestive tract become sweet and increase phlegm.
- (8) Some pungent foods and herbs maintain the same taste in the digestive tract and have the property of curing phlegm and wind disorders.
- (9) Some astringent foods and herbs in the digestive tract become sweet and have a rough potency; despite this they have the property to cure the disturbances of three humors.
- (10) Some astringent foods and herbs in the digestive tract become pungent and act as elixirs of long life and virility.
- (11) Some pungent foods and herbs in the digestive tract become sweet and have the property to cure phlegm and wind disorders.

Hence, the main healing property of foods and herbs does not depend only on their taste, potency (related to the taste) and digestive taste. There are foods and herbs whose intrinsic quality represent the main healing property or power.

Table of Examples of Above Tastes with Foods and Herbs

Ingredients	Taste	Dige-Taste	Potency	Property
1. (Sru) Barley	sweet	sour	hot, heavy, oily	Increases phlegm and bile
2. White Beans	astr & sweet	pungent	cold, light	Stops diarrhea, obstruction in the channels
3. Linseed	sweet & bitter	pungent	oily, warm, heavy	Increase Phlegm, bile
4. Rabbit Meat	sweet	pungent	cool, rough	Stops diarrhea
5. Radish	pungent	pungent		Increases the three humors
6. Compounded Salt	salt	pungent		Increases heat and stimulates
7. Salt	salt	sweet	Heavy	Increases Phlegm
8. Asafoetida	pungent	pungent	Light	Remedies Ph & Wi, alleviates pain,
9. Terminalia Chehula	astringent	Sweet	rough	Good for all three humors
10. Terminalia Bellerica	astringent	pungent & sweet	Cold	Reinforces hair, eyesight
11. Long Pepper	pungent	Sweet	Oily	Cures phlegm, wind

Examples of Foods and Herbs in which Potency does not Follow taste

Ingredients	Taste	Dige-Taste	Potency	Property
1. Sesame Seeds	sweet	Pungent	hot, smooth heavy	Increases heat, phlegm-bile
2. Bletilla Striata Reichb 75,	sweet bitter	Pungent		Cures germ diseases, stimulates appetite
3. Garlic	pungent	Pungent	sharp, oily, heavy	Cures wind disorders, increases heat
4. Grape	sweet	astringent	cold, heavy	Cures lung ailments
5. Black Pepper	pungent	pungent	rough, sharp	Increases digestive heat
6. Cassia	sweet pungent	sweet	Oily	Increases heat, mild purgatives
7. Honey	sweet	bitter	Cold	Decreases phlegm
8. Embolic Phyllanthus	sour	sweet	cold, light, rough	To cure blood, bile and other disorders of a hot nature

In analyzing the property of herbs, the potencies expressed by the taste are given the most consideration. However, it would be irresponsible to neglect other potencies, because the intrinsic properties of certain ingredients is most powerful.

Intrinsic potencies of herbs that do not accord with the potency expressed by the taste can be deduced by pondering over the potencies of heaviness, lightness, etc., of a particular herb, and through clinical experience gathered over an extended period of time. There was probably an age in which neither man nor animals were able to recognize if a plant was poisonous or had curative properties. Then, on the basis of daily experience, people gradually learned to distinguish good herbs from bad ones. Tibetans began to infer the potency of herbs on the basis of the taste, properties and potencies, when —about three thousand years before Christ—they first conceived of the theory of the four elements as the underlying ground for everything. In the course of time, uniting the deductive with the experiential method they discovered more than 2,000 medicinal ingredients. Using the same deductive means and modern technology, we can now identify new herbs that though may not grow in Tibet, could, nonetheless, be used in Tibetan Medicine. *The Exegetical Treatise* states that "on this earth, there is nothing that is not a medicine."

Even toxic substances compounded with other ingredients become curative. Accordingly, Deumar's *The Crystal Necklace* states the following:

If you knowing the point of skill in means that potency
of herbs, plants and minerals of the mountains, we can
resurrect the dead.

Chapter XII The Identification of Plants

1 General the Identification of Plants

In the past, doctors recognized most of the curative properties of herbs and medicinal substances from their taste. Concerning this point, Deumar's *Crystal Necklace* states the following:

Keeping in mind the qualities of the four elements, 'prepare herbs [in one of the three following ways]: uniting them on the basis of tastes, on the basis of potencies, or on the basis of the tastes they assume in the digestive tract. First, recognize the medicinal property of an herb, etc., on the basis of one of the six tastes, its taste in the digestive process (one of the three), and on the basis of the eight qualities and the seventeen characteristics it possesses.

It continues to state the following:

Discarding the plants around you, where will you find powerful and rare medicines? Knowing how to use all that grows around you as a medicine, every herb in this world can be a remedy. Collect and prepare all herbs that you find. To do so, become proficient in the use of tables illustrating the 46,656 tastes, and subdivisions of the single and combined tastes. This way you can avoid depending on the identification of the property of plants made in the past by expert doctors and on the names they have called the herbs. From the taste you will infer the elementary components, digestive tastes, potency, characteristics and therapeutic effects (with respect to the three humors).

Name unknown plants, as doctors did in the past, after their shape or their function.

Nowadays, when questioned on how the medicinal plants have been identified and classified in terms of taste, potency and digestive taste, Tibetan doctors reply that "the healing properties of plants have been understood and then revealed by the wisdom of the minds of enlightened ones. Ordinary beings like us cannot comprehend such properties through analytical thinking."

This is an answer that tries to mask one's ignorance behind an enlightened being's wisdom and endangers the creativity of young doctors from acquiring

new knowledge. With enthusiasm and intelligence there is nothing that cannot be understood and realized. Intelligence applied to the analysis of things and actions represents the main path of human development. This is not incompatible with the fact that, in the past, many healing herbs have been identified through special powers. It is certainly possible to understand intrinsic properties of herbs and other substances through different degrees of higher knowledge, acquired by training in the techniques involving channels, energies and vital essences of the body. These techniques lead to the perception of reality until the fully awakened mind is realized.

The properties of many medicinal ingredients have, however, been recognized experientially. Learned doctors transmitted their knowledge through many generations. Moreover there are many stories that tell us how observing the behavior of birds has identified certain medicinal plants and other animals that used them as a remedy for their problems.

In Dranti's *Bushel of Gold*, we read the following account:

One day, Lungmati, a Bhutanese woman who served Dre Sherab Senghe, a doctor of the region of Nyanam went to chop wood in the forest. Unthinkingly, with her ax she hit a snake that was on the tree. The screams of pain emitted by the snake attracted another snake that looked at the wounded snake for a while and then disappeared. After sometime the snake came back carrying a plant and applied it to the wound of the other snake. Seeing that the wound of the snake had healed, she picked the plant off the snake and brought it to the doctor, telling him what had happened. This plant is nowadays known in Tibetan as the "remedy of the snake" (whose botanical name is *Var. tatsiensis*) 76.

On another occasion, when the same woman again went to chop wood in the forest, she saw a monkey whose skull had been fractured by a rock fallen from a mountain slope. Another monkey came to help the injured friend and applied an herb to the fractured skull. The woman saw that after a few days the monkey recovered. She picked the same plant and as before, and brought it to the doctor. Nowadays this plant is known as "the monkey remedy," i.e., white aconite.

The medicine known as *Cicatrization twenty-five*, contains twenty ingredients (*including the snake and monkey remedy*), whose identification is

based on similar stories. Examples of these ingredients are "Senecio Solidagineus Hand-mazz 77, used by wild boar; (an herb used by wild boars to heal wounds at the snout); Oxytropis reniformis 78, used by owls; Corydalis dasyptera Maxim 79, used by the musk deer; Sedum tatarinowii Maxim 80, used by the marmot."

These stories have written records, but many others are just told orally by elderly Tibetans.

2 Intrinsic Potencies

The Crystal Necklace gives the following list of eight intrinsic properties of herbs as follows:

(1) "The Strength Property" is pointed out in The Exegetical Treatise with the following words: "While the Himavant hills have a lunar energy, those of the Vindhya hills are permeated with a solar energy."

Himavant refers to the snowy mountain, to the rocks of the high mountains and to places that are not exposed to the sun. The medicinal plants that grow in these cold places are permeated with the lunar energy i.e., a very cool strength. Due to the climatic conditions of the place where they grow, these plants possess the best cool strength. Plants with a warm strength found in these areas grow in an unfriendly environment; thus, they are of an inferior quality and are not to be used. Vindhya hills refers to the places exposed to the sun and to hot areas. The herbs that grow in these areas are permeated with a solar strength and have therefore a very strong warming quality. Plants with a cold strength found in these areas, grow in an unfriendly environment; thus, they are of an inferior quality and are not to be used. In medical treatises and instructions it is said that the very "core" of a plant's curative property lies in its [cold or warm] strength. Therefore, it is essential to keep this in mind.

(2) "The Potency of Taste" refers to the intrinsic property of an herb that in most cases accords with the taste of that substance. However, of those that are illustrated in the 20th chapter, "the Healing Properties of Single Ingredients" of *The Exegetical Treatise*.

(3) "The Potency of Smell" are, for example, camphor, white sandalwood, asafoetida, Kashmir saffron and musk, whose healing properties lie in their odor, exemplify the property of smell. When their smell vanishes, their healing properties also disappear, even though their taste is still strong.

(4) "The Antidote Potency" describes substances effective for specific pathologies. For example, meat, bile and peacock's feathers are remedies for poisoning. The snout of a pig is a remedy for anthrax; the flesh and fat of otters can resolve fish-bones stuck in the larynx; water foam and the bile of water animals are remedies for burn. Spotted leopard's bones and *Fossilia ossis Draconis* 81, are remedies for dog bite; musk is a remedy for poisoning caused by snakebites. Substances such as Guggul and mustard seeds are remedies for provocations caused by elemental spirits, etc.

(5) "The Analogue Potency" states that different parts of the body are used as specific medicines. For instance, old bones from the human forehead can alleviate headaches; snake eyes remedy eye problems; wolf tongue alleviates a swollen tongue; tiger teeth, leopard teeth *Fossilia ossis Draconis* relieve toothache; thyroid glands of sheep relieve goiter; the heart of wild yak, parrot, and hare address heart problems; lungs of fox, swallow and baby goat can treat pulmonary problems; animal bile resolves gall bladder disorders; three year old mutton and sheep's kidney are useful for kidney disorders and pain caused by irregular menses; intestines of sand badger and lynx resolve intestinal colic.

(6) "The Shape and Color Potency" refers to certain remedies having curative ability because of their shape or color. For example, *Dorklad* ⁸² (a stone whose pattern resembles the brain) would be for cerebral disorders. The four kinds of broad bean for cardiac disorder, liver, kidneys and spleen problems. (*Choerospondia axil*, ⁸³ remedy for heart, *Entada phaseoloides*, ⁸⁴ remedy for liver, *Entada phaseoloides*, ⁸⁵ remedy for spleen and *Canavalia gladiata*, ⁸⁶ remedy for kidney). Sandalwood, ⁸⁷ root of the hairy *Onosma*, ⁸⁸ Cinnabar, ⁸⁹ Caragana Tibetica, ⁹⁰ and Shellac, ⁹¹ because of their red color, are remedies for blood disturbances. Barberry is a remedy for bile disturbances because of its yellow color.

(7) "The Associative Potency" states that an observable trait of a given ingredient can be used as a remedy because its action is intrinsically there if it can be observed. For example, the bones of a man killed by lightning could treat shock; a man who died from intestinal colic can be used as part of a remedy for intestinal disorders. Ingredients with a round shape help goiter and gum problems. Earth accumulated at the opening of a rat hole situated on the slope of a mountain and facing east can treat chronic intestinal problems. Hare's brain and rubies can treat symptoms of loss of blood, and the triangular fragment of a fractured skull can help skull fractures.

(8) "The Intention Potency" states that the curative power of certain ingredients results from the strength of the intention and aspirations made by

the Buddhas, bodhisattvas, deities and ascetics of the past. Wangpo Rilbu⁹², for example (the oval calcinations that are found in the body of certain animals such as the musk deer) and *Iris goniocarpa*,⁹³ are used as remedies for poisoning. *Rhododendron* flower,⁹⁴ and root of *Gymnadenia*,⁹⁵ are considered long life elixirs and give virility.

3 Potencies of Tastes

Properties of medicine are twofold: taste properties and intrinsic properties. The property by taste represents the general healing property of an herb. The intrinsic property of a certain herb represents the specific healing property.

The general property expressed by taste can be broken down into further categories of identification: potencies, properties and characteristics.

(1) "The potency" refers to eight potencies, i.e. heavy, oily, cool, blunt, light, rough, hot and sharp. The first four are the main potencies. The remaining four are potencies that are principally opposite the first four. Heavy and oily resolve wind imbalances. Cool and blunt resolve bile imbalances. Light, rough, hot and sharp potencies relieve phlegm imbalances. Light, rough and cool potencies incite wind imbalance. Hot, sharp and oily potencies incite bile disorders. Heavy, oily, cool and blunt potencies incite phlegm imbalances.

(2) "The lunar and solar property" of plants of the Himavant Mountains and Vindhya hills, mentioned in *The Exegetical Treatise* refers to the best cool and warm property of medicinal ingredients. Ingredients with a cool property remedy disorders of a hot nature; those with a warm property can remedy disorders of a cold nature. Incidentally Himavant and Vindhya symbolizes respectively high mountainous and warm regions, in particular the shadowy and cold places ideal for the growth of a plant with a cool property and, the low hot plains, in particular the sunlit places, are ideal for the growth of plants of a hot property.

(3) "The seventeen characteristics" are the following ones: smooth, heavy, warm, oily, stable, cool, blunt, cold, pliant, liquid, dry, lean, hoot, light, sharp, rough and mobile. They include the eight potencies mentioned before plus nine other attributes. The eight potencies are the bases to which are ascribed the other nine attributes. Each basic potency has its own specific characteristic. The only exception is the rough potency, which has two-dry and lean (*see table*).

Each characteristic has its opposite:

1. smooth/rough. 2. heavy/light. 3. warm/cool. 4.oily/lean. 5. stable/mobile. 6. cool/warm. 7. blunt/sharp. 8. cold/hot. 9. pliant/hard. 10. liquid/thick. 11. dry/moist. 12. lean/oily. 13. hot/cold. 14.light/ heavy. 15. sharp/blunt. 16. rough/ smooth. 17. mobile/stable.

These 17 characteristics are opposing in their nature, and can pacify the 20 characteristics of the three humors and are thus are known as "potencies."

The Periodic Table of Elements

Atomic Number	1	2	3	4	5	6	7	8	
Symbol	He	O	Cd	B	Lt	R	Ho	Sh	
Name	Heavy	Oily	Cold	Blunt	Light	Rough	Hot	Sharp	
Atomic Number	9	10	11	12	13	14	15	16	17
Symbol	St	Sm	Co	P	M	D	Le	W	Lq
Name	Stable	Smooth	Cool	Pliant	Mobile	Dry	Lean	Warm	Liquid

Table of the Tastes and Potencies from the four Elements

6 Tastes	Sweet		Sour		Salty		Bitter		Pungent		Astringent	
Element	Earth	water	fir	earth	water	fire	water	air	fire	air	earth	air
Potency of the Elements and Atomic Weight	6 He	7 Lq	7 Ho	6 He	7 Lq	7 HO	7 Lq	6 Lt	7 Ho	6 Lt	6 He	6 Lt
	5 St	6 Cd	6 Sh	5 St	6 Co	6 Sh	6 Co	5 M	6 Sh	5 M	5 Stl	5 M
	4 B	5 He	5 D	4 B	5 He	5 D	5 He	4 Cd	5 D	4 Co	4 B	4 Co
	3 Sm	4 B	4 R	3 Sm	4 B	4 R	4 B	3 R	4 R	3 R	3 Sm	3 R
	2 O	3 O	3 Lt	2 O	3 O	3 Lt	3 O	2 Le	3 Lt	2 Le	2 O	2 Le
	1 D	2 Sm	2 O	1 D	2 Sm	2 O	2 Sm	1 D	2 O	1 D	1 D	1 D
		1 P	1 M		1 P	1 M	1 P		1 M			

Table of the 166 Elemental Potencies
(Per Atomic Weight in the Tastes)

Tastes Atomic Weight	Sweet	Sour	Salty	Bitter	Pungent	Astringe nt
Heavy	11	3	2			
Oily	5	4	5	1		
Cold	6			6		
Blunt	8			4		4
Light				1	9	
Rough		1	2	1	7	
Hot		7	1		3	
Sharp		2	2		6	
Stable	5	4				
Smooth	5					
Cool				4		4
Pliant	1		1	1		
Mobile			1	5	6	
Dry		6			6	2
Liquid	6		2	6		

In measuring the potency of the qualities (*or weight*) of each taste, the same potencies are added together, and from the opposite ones the difference is subtracted. For example, in the sweet taste the heavy potency of the earth element has 6 weight of potency and the heavy potency of the water element that has 5 weight of potency for a total 11 weight of potency.

In the sour taste the heavy potency of the earth element has 6 weight of potency, and from it the (*opposite*) light potency of the fire element that has 3 weight of the potency which is subtracted, there remains 3 weight of the heavy potency.

In certain cases the potency of two opposite qualities is equal, and thus, both potencies are neutralized. This transpires for the astringent taste, whose opposite qualities — heavy of the earth element and light of the air element

where both have 6 for potency. When these two potencies meet, both the light and heavy potencies are neutralized.

In a more accurate evaluation of the total potency of tastes, the potencies are also estimated on the basis of their natural potency, which are in general alignment of table number are level of potencies (*low, middle and high*). But, in the specific are, for example, though the oily potencies of both the fire and earth element have number 2 potencies, the oily potency is in the middle in the fire element; while the oily potency is low in the earth element. Similarly, though the blunt potency of the earth and water elements has a number 2 potency, the blunt potency of earth is high, that of water in the middle.

Another factor to consider is the relative potency of the elements of the tastes. Per convention, the principal element is listed first. For instance, the constitutive elements of the sweet taste are earth (*principal*) and water (*secondary*). Thus, the heavy potency of earth makes it the principal element. In the sour taste, determined by fire and earth, the heavy potency of earth is secondary because it belongs to the secondary element of that taste.

In certain cases, the special interaction of low, middle and high intrinsic potencies produces "anomalous results." For example, the hot potency of the fire element has potency 7 in both the sour taste (*fire-earth*) and the pungent taste (*fire-air*). With the sour taste, the interaction of fire and earth do not create the conditions for increasing the hot potency. With the pungent taste, the interaction of fire and air should intuitively reduce the hot potency of fire as a consequence of the cold potency of air. This, however, does not take place. Natural law instead unfolds with the air element increasing the intensity of fire and thus the hot potency of the pungent taste is enhanced.

The Bon medical text called *Chebum Trawo* and *The Words of the Elder* explain the anomalous potency in the same way.

4 Examining the Characteristics of Taste

Taste serves as the basis, the foundation, for the potency, property and characteristics of medicinal ingredients. Ancient Tibetan medical treatises are in disagreement about how to determine the proportions of different potencies in tastes. In one method, the level of the potencies follows the order in which the six tastes are listed or on the basis of the nature of the elements. In another, it is measured by summing up the number that represent the level of the potency for each taste.

Concerning the degrees in which potencies are present in the different tastes, The Exegetical Treatise states the following:

The heavy potency exists to a lesser degree in the salty taste; to a middle degree in the astringent and high in the sweet taste. The oily potency exists to a lesser degree in the salty, to a middle degree in bitter and high in the sweet taste. The cold potency exists to a lesser degree in the astringent, to a middle degree in bitter and high in the sweet taste. The blunt potency exists to a lesser degree in the bitter, to a middle degree in astringent and, high in the sweet. The light and rough potencies exist to a lesser degree in the sour, to a middle degree in pungent and, high in the bitter taste. The hot and sharp potencies exist to a lesser degree in the pungent, to a middle degree in sour and, high in the salty taste.

The *Bum Zhi of Medicine* of ascribes potencies to tastes in a slightly different way:

The heavy potency exists to a lesser degree in the astringent, to a middle degree in the sweet, and high in the salty taste. The oily potency exist to a lesser degree in the sweet, to a middle degree in the sour, and high in the salty taste. The cold potency exists to a lesser degree in the astringent, to a middle degree in the sweet and, high in the bitter taste. The blunt potency exists to a lesser degree in the bitter, to a middle degree in the astringent and high in the sweet taste. The light and rough potencies exist to a lesser degree in the sour, to a middle degree in the pungent, and high in the bitter taste. The hot and sharp potencies exist to a lesser degree in the sour, to a middle degree in the salty and high in the pungent taste.

In the *Words of the Elder*, Zurkhawa Lodrö Gyalpo states the following:

In my understanding, the above statements concerning potencies and tastes of the Exegetical Treatise is made from the viewpoint of harmonious tastes. However, to conform to the general principles of The Four Treatises on Medicine, the following would be the correct way of ascribing potencies to tastes: "Salty, sour and sweet are heavier; sweet, sour and salty are increasingly oilier. Astringent, sweet and bitter are increasingly colder; Astringent, bitter and sweet are increasingly blunter. Sour, bitter and pungent are increasingly lighter and

rougher; salty, sour and pungent are increasingly hotter and sharp."

Two types of tables illustrate the level of the potency: tables of the cause and tables of the result. The former simply states the potencies of the elements that compose the tastes. The latter presents the sum of the potencies of the elements of which the tastes are comprised.

Zurkhawa's Table of the 154 Potencies
(Per Atomic Weight in the Tastes)

Tastes Atomic Weight	Sweet 40	Sour 27	Salty 17	Bitter 21	Pungent 39	Astringent 10
Heavy	10	3	1			
Oily	4	4	4			
Cold	5			7		
Blunt	7			3		4
Light				2	9	
Rough		1	4	3	7	
Hot		7	2		5	
Sharp		2	3		6	
Stable	5	4				
Smooth	3					
Cool						4
Pliant	1		1	1		
Mobile			1		6	
Dry		6			6	2
Liquid	5		1	5		

Zurkhawa's Cause and Effect Table of the Elements of Taste**Table of the sweet, sour and salty tastes**

Sweet				Sour				Salty			
13 Causes		8 Results		13 Causes		6 Results		14 Causes		8 Results	
Earth	Water	Earth	Water	Fire	Earth	Fire	Earth	Water	Fire	Water	Fire
He	Lq	=He	=Lq	Ho	He	=Ho	=He	Lq	Ho	=Lq	=Ho
St	Cd	=St	=Cd	Sh	St	=Sh	=St	Cd	Sh	-	=Sh
B	He	=B	+	D	B	=D	-	He	D	=He	-
Sm	B	=Sm	+	R	Sm		-	B	R	-	=R
O	O	+	=O	Lt	O	-	=O	O	Lt	=O	-
D	Sm	-	+	O	D	+	+	Sm	O	-	+
	P		=P	M		-		P	M	=P	=M

Table of the Bitter, Pungent and Astringent Tastes

Bitter				Pungent				Astringent			
13 Causes		7 Results		13 Causes		7 Results		12 Causes		4 Results	
Water	Air	Water	Air	Fire	Air	Fire	Air	Earth	Air	Earth	Air
Lq	Lt	=Lq	=Lt	Ho	Lt	=Ho	=Lt	He	Lt	-	-
Cd	M	=Cd	=M	Sh	M	=Sh	=M	St	M	-	-
He	Co	-	+	D	Co	=D	-	B	Co	=B	=Co
B	R	=B	=R	R	R	+	=R	Sm	R	-	-
O	Le	-	-	Lt	Le	+	=Le	O	Le	-	-
Sm	D	-	-	O	D	-	+	D	D	+	=D
P		=P		M		+					

Pema Karpo discusses this topic in his *Commentary to The Four Medical Treatises, A Treasure for The Well Being of All*. His understanding of the cause and effect are in slightly different way, as shown in the following tables:

Pama Karpo's Cause and Effect Table of the Elements of Taste

Table of the sweet, sour and salty tastes

Sweet				Sour				Salty			
13 Causes		8 Results		13 Causes		7 Results		14 Causes		8 Results	
Earth	Water	Earth	Water	Fire	Earth	Fire	Earth	Water	Fire	Water	Fire
He	Lq	=He	=Lq	Ho	He	=Ho	=He	Lq	Ho	=Lq	=Ho
St	Cd	-St	-Cd	Sh	St	-Sh	-St	Cd	Sh	-	-Sh
B	He	=B	+	D	B	=D	-	He	D	=He	-
Sm	B	-Sm	+	R	Sm	-R	- ?	B	R	-	-R
O	O	+	=O	Lt	O	-	=O	O	Lt	=O	-
D	Sm	-	+	O	D	+	+	Sm	O	-	+
	P		=P	M		-		P	M	=P	=M

Table of the Bitter, Pungent and Astringent Tastes

Bitter				Pungent				Astringent			
13 Causes		7 Results		13 Causes		7 Results		12 Causes		4 Results	
Water	Air	Water	Air	Fire	Air	Fire	Air	Earth	Air	Earth	Air
Lq	Lt	=Lq	-Lt	Ho	Lt	=Ho	=Lt	He	Lt	-	-
Cd	M	=Cd	M	Sh	M	=Sh	=M	St	M	-	-
He	Co	-	+	D	Co	=D	-	B	Co	=B	=Co
B	R	=B	=R	R	R	+	=R	Sm	R	-	=R ?
O	Le	-	-	Lt	Le	+	=Le	O	Le	-	-
Sm	D	-	-	O	D	-	+	D	D	+	D
P		=P		M		+					

In summary, according to my opinion, leaving out the characteristics of the digestive taste, the strength of the different potencies of tastes should be the following: salty, sour and sweet are increasingly heavier; sweet, sour and salty are increasingly oilier; astringent, sweet and bitter are increasingly colder; bitter, astringent, and sweet are increasingly blunter; bitter and pungent are increasingly lighter; sour, bitter and salty are increasingly rougher;

salty, pungent and sour are increasingly hotter; sour, salty and pungent are increasingly sharp.

5 The existing factors of inconsistent taste and function

The Exegetical Treatise states that the curative ability of a medicinal ingredient is powerful if "...the taste, digestive taste and intrinsic potencies are concordant...When taste, digestive taste and potencies are in disagreement, the latter are more effective than the former."

This can be seen in the following example. A sweet ingredient, which retains the sweet taste during digestion, and has the heavy, blunt, cold, liquid, oily, stable, smooth and pliant potencies (i.e., all three characteristics of taste, digestive taste and potency), will be compatible with both the earth and water elements. The therapeutic efficacy of that ingredient will in general be high because of this compatibility. The different healing properties of "concordant" ingredients depend on the varying proportion in which the five elements are present in a given ingredient. The healing properties are also dependent on the aging process of a given ingredient, i.e., on the transformation that occurs in the preparation of a medicine in which more ingredients are mixed together in the form of powders, pills, etc. When the potency of an ingredient has changed, only one of its three characteristics (taste, digestive taste, and potency) expresses the authentic healing property of the ingredient. In ingredients whose three characteristics are discordant, the therapeutic efficacy is determined for 20% by the taste, for the 30% by the digestive taste and for the 50% by the intrinsic potencies.

Table of the Illustration of Potency Level

Ingredient	Potency		Degree	√	×	Concordance / Discordance
Swertia chirata (Tig Ta) ITM n. 420	Taste potency	Bitter, Cd	20%	10 0%	0	Complete concordance
	Digestive potency	Bitter, Cd	30%			
	Intrinsic potency	Cures hot disorders	50%			
Nutmeg ⁹⁶ , (DZw Ti) ITTM n 200	Taste potency	Pungent Lt	20%	10 0%	0	Concordance of pungent taste and digestive taste; has the specific property of healing Phlegm and Wind
	Digestive potency	Pungent Ho	30%			
	Intrinsic potency	Heals wind	50%			
Blue poppy (Utpala sNGon Po) ITM n. 718	Taste potency	Sweet Cd	20%	10 0%	0	Complete concordance
	Digestive potency	Sweet Cd	30%			
	Intrinsic potency	Heals Hot liver	50%			
Rhododendron flower (Dwa Li) ITM n. 251	Taste potency	Sweet Cd	20%	80 %	2 0 %	Discordance between potency of taste and digestive potency
	Digestive potency	Pungent Ho	30%			
	Intrinsic potency	help digestive	50%			
Angelica (lCa Wa) ITM n. 395	Taste potency	Sweet B Cd	20%	80 %	2 0 %	Discordance between potency of taste and intrinsic potency
	Digestive potency	Pungent W	30%			
	Intrinsic potency	Heals kidney	50%			

During preparation, the medicinal ingredients need to be mixed in one of the following procedures: mixing ingredients of the same taste, mixing ingredients of the same digestive taste or mixing ingredients of the same intrinsic potency.

Plants whose principal healing property lies in the taste are those in which the three characteristics are concordant, or in agreement. Plants whose principal healing property lies in their digestive taste are those that (*just like their original taste*) are beneficial for one or the other of the three humors. For example, the sweet taste that cures wind or bile imbalance, the sour taste that cures phlegm and wind imbalances, and the bitter taste that cures the imbalances of phlegm and bile. Plants whose principal property lies in the intrinsic potency are those that despite having a taste which harms one of the three humors they actually cure that humor. For example, honey, unlike other sweet ingredients, decreases phlegm. Another example is embolic myrobolan, which, unlike other sour substances, heals blood and bile disorders. Other examples include the Bonduc fruit (*Caesalpinia crstd ITTM 240*) and Moonseed (*Tinospora sinensis ITTM 321*) that, having potencies opposite their taste, and unlike other bitter ingredients, cures phlegm and wind imbalances.

According to The Words of the Elder, ancient Tibetan doctors following the same principles, explained in this chapter, for preparing herbal medicines. Herbal medicines should be prepared in the way just explained. Unless they comprehend this same procedure, Tibetan doctors of future generations will be obliged to become experts in all the medicinal formulas described in The Instructional Treatise (remedy of the illnesses of the entire body). Nowadays too, older doctors are totally ignorant of the principles underlying the preparation of herbal medicines which is based on taste, digestive taste and, intrinsic potencies. They believe that they are great, and in contradiction to The Four Treatises on Medicine add [without any criteria] ingredients to herbal formulas described in The Conclusive Treatise.

Table of 63 Combinations of Tastes
(1) Single tastes

6 single tastes	Sweet
	Sour
	Salty
	Bitter
	Pungent
	Astringent

(2) 15 combinations of double taste

5 combinations of the sweet taste	Sweet and sour
	Sweet and salty
	Sweet and bitter
	Sweet and pungent
	Sweet and astringent
4 combinations of the sour taste	Sour and salty
	Sour and bitter
	Sour and pungent
	Sour and astringent
3 combinations of the salty taste	Salty and bitter
	Salty and pungent
	Salty and astringent
2 combinations of the bitter taste	Bitter and pungent
	Bitter and astringent
1 combinations of the pungent taste	Pungent and astringent

(3) 20 combinations of the three taste

10 combinations of three tastes; the dominant taste is sweet	Sweet, sour, salty
	Sweet, sour, bitter
	Sweet, sour, pungent
	Sweet, sour, astringent
	Sweet, salty, bitter
	Sweet, salty, pungent
	Sweet, salty, astringent
	Sweet, bitter, pungent
	Sweet, bitter, astringent
	Sweet, pungent, astringent
6 combinations of three tastes; the dominant taste is sour	Sour, salty, bitter
	Sour, salty, pungent
	Sour, salty, astringent
	Sour, bitter, pungent
	Sour, bitter, astringent
3 combinations of three tastes; the dominant taste is salty	Sour, pungent, astringent
	Salty, bitter, pungent
	Salty, bitter, astringent
1 combination of the bitter dominant	Salty, pungent, astringent
	Bitter, pungent, astringent

(4) 15 combinations of the four tastes

10 fourfold combinations of the sweet taste	Sweet, sour, salty, bitter
	Sweet, sour, salty, pungent
	Sweet, sour, salty, astringent
	Sweet, sour, bitter, pungent
	Sweet, sour, bitter, astringent
	Sweet, sour, pungent, astringent
	Sweet, salty, bitter, pungent
	Sweet, salty, bitter, astringent
	Sweet, salty, pungent, astringent
	Sweet, bitter, pungent, astringent
4 fourfold combinations of the sour taste	Sour, salty, bitter, pungent
	Sour, salty, bitter, astringent
	Sour, salty, pungent, astringent
	Sour, bitter, pungent, astringent
1 fourfold combinations of the salty taste	Salty, bitter, pungent, astringent

(5) 6 combinations of five tastes and 1 combination of six tastes

5 combinations of the five tastes; dominant taste is sweet	Sweet, sour, salty, bitter, pungent
	Sweet, sour, salty, bitter, astringent
	Sweet, sour, salty, pungent, astringent
	Sweet, sour, bitter, pungent, astringent
	Sweet, salty, bitter, pungent, astringent
1 dominant sour of five tastes	Sour, salty, bitter, pungent, astringent
1 combination of six tastes	Sweet, sour, salty, bitter, pungent, astringent

Chapter XIII

Diet and Nutrition

1 Characteristics and Properties of Foods and Drinks

Adopting a diet based on the understanding of the potencies of foods and drinks enables us to maintain our health, and to live a long life. An improper diet creates imbalances in the physiological levels of the three humors and anomalies in their location in the body, conditions that are both cause of illnesses (even life threatening ones.) If we cherish our health and our life, we must become dietary experts.

Foods

The following description regards those foods that form the traditional diet of the Tibetan populations. The Exegetical Treatise divides foods into five categories: grains, meat, oils and fats, vegetables, and cooked foods.

1) Grains

Grains are of two types: grains with bristles and leguminous grains.

Table Grains with Bristles

Grain	Taste	Digestive	Potency	Effect
Rice No.731	Sweet	Sweet	O, Sm, Co, Lt	To cure diarrhea, vomit and to be balance 3 humors
Millet No. 721	Sweet	Sweet	He, Co	Heals wounds, and fractured bones
Broomcorn millet No. 736	Sweet	Sweet	Co,R,Lt	Stimulates appetite
Wheat No. 722	Sweet	Sweet	He, Co	To be Vitamin, cures wind and bile
Highland barley No. 727	Sweet	Sweet	He, Co	Replenish physical vigor
Barley No. 728	Sweet	Sweet	Co, Lt	Cures phlegm and bile
Horse barley	Sweet	Sweet	Co, Lt	Cures phlegm and bile

Table of the Legumes

Grain	Taste	Potency	Effect
Pea No. 744	Sweet, astringent	Cd, Lt, Le	Blood vessel dilatation, stops diarrhea, reduces fat.
Hyacinth bean No.735	Sweet, astringent	Cd, Lt, Le	Blood vessel dilatation, stops diarrhea, reduces fat.
Broad bean No. 723	Sweet, pungent		Cure Asthma and hemorrhoids, removes mucus. cure phlegm and wind imbalances
Kidney bean No.734	Astringent, sweet	O	Increases virility, cure imbalances of wind.
Lentil No.741	Astringent, sweet	W	Cure erysipelas, podagra and blood disorders.
Sesame seed No.429-430	Sweet,	He, W	Increases virility and cures wind imbalance.
Flaxseed No. 737	Sweet, bitter	O, Sm	Cure wind imbalance.
Buckwheat No.729	Sweet,	Cd, Lt	Cures wounds.

All kinds of grain have a heavy potency, and thus contribute to an imbalance of phlegm. Early grains, grains that have lost their oily potency, and grains aged for more than a year have a light potency. Raw, any grain has a heavy potency that, however, becomes light when the grain is cooked. The addition of salt, oil and other substances in cooking, make the grains even more light, making it more digestible.

2) Meats

Meat is classified into eight types in accordance with eight types of animals:

(1) First categories of animal, that of gallinaceous birds who dig for food with their claws; such as the peacock, the Tibetan snowcock, the Himalayan partridge, the red-beak chough and most wild mountain birds.

(2) Second categories of animal, that of birds who dig for food with their beaks; such as the parrot, the cuckoo, the wild pigeon, the magpie, and the lark, etc.

(3) Third categories of animal, that of small wild animal; such as the deer, the musk deer, the Tibetan gazelle, the argali, the hare, the Tibetan antelope, the bharal, the serow, the roe deer and the goral, etc.

(4) Fourth categories of animal, that of great wild animal; the wild boar, the buffalo, the rhinoceros, the wild ox, the wild ass, the wild yak and the wild dzo, etc.

(5) Fifth categories of animal, that of carnivores; such as the tiger, the leopard, the bear, the black bear, the snow leopard, the wolf, the lynx, the fox and the red wolf, etc., and other types of birds such as the Himalayan vulture, the falcon, the eagle, the kite, the owl and the hawk-sparrow, etc.

(6) Sixth categories of animal, that of domestic animals; such as the dzo, dzomo, the yak, dri, the camel, the donkey, the cow, the ox, the tollai, the goat, the sheep, the dog, the pig, the fowl and the cat, etc.

(7) Seventh categories of animal, that of underground animals; such as the marmot, the hedgehog, the frog, the snake, the sand badger, the gecko lizard, the agama and the scorpion, etc.

(8) Eighth categories of animal, that of aquatic creature; such as the crane, the swan, the red mallard, the cormorant, the egret, the otter and the fish, etc.

First category of animals, that of gallinaceous birds who dig for food with their claws	མིང་།	Name	名
	ཆ་བྱ།	Peacock	孔雀
	གང་མོ།	Tibetan Gould	藏雪鸡
	ཕྱག་པ།	Himalayan Partridge	鹧鸪
	ལྷ་ཁྱ།	Red-beak Chough	红嘴山鸦

2

Second category of animals, that of birds who dig for food with their beaks	མིང་།	Name	名
	མེ་ཙ།	Parrot	鹦鹉
	ཁྱ་ལྱ།	Cuckoo	杜鹃
	མི་པ།	Wild pigeon	鸽
	ལྷ་ཁྱ།	Magpie	喜鹊
	ལོ་ལོ་ལོ་ལོ།	Lark	百灵鸟

3

Third category of animals, that of small wild animals	མིང་།	Name	名
	ག་བ།	Deer	鹿
	མཐ་བ།	Musk Deer	獐 子
	ཆོ་བ།	Tibetan gazelle	藏 原 羚
	གཉན།	Argali	盘 羊
	རི་ཐོང་།	Hare	兔 子
	གཙོང་།	Tibetan's antelope	藏 羚 羊
	མནའ་བ།	Bharal	岩 羊
	ཐུ།	Serow	鬣 羚
	ཁ་ཤ།	Roe deer	狍

4

Fourth category of animals, that of huge wild animals	མིང་།	Name	名
	ཕག་ཆོང་།	Wild Boar	野 猪
	མ་ཉེ།	Buffalo	水 牛
	བཞེ་རུ།	Rhinoceros	犀 牛
	ཐུག་མཐང་ཆོང་།	Wild Mountain Ox	野 黄 牛
	ཐུང་།	Wild Ass	野 马
	འབྲོང་།	Wild Yak	野 牛
	མཆོ་ཆོང་།	Wild Hybrid Ox	

5

Fifth category of animals, that of predatory wild beasts that catch their prey with strength and agility	མིང་།	Name	名
	ཁྲག་	Tiger	虎
	གཟིག་	Leopard	豹
	རྩམ་	Black bear	熊
	ཕྱེད་	Yellow bear	狗 熊
	གསལ་	Snow leopard	
	ལྷོང་གི།	Wolf	狼
	གམི།	Tibetan Lynx	猞 猊
	མ།	Fox	狐
	འཕར་བ།	Wild Dog	
	ཐུལ།	Monkey	猴 子
	བྱ་ཁྲོད།	Himalayan Vulture	秃 鹫
	ཁ།	Falcon	白 尾 鹞
	ཐུག་	Eagle	玉 带 海 雕
	རྩུ་ལེ།	Kite	鸢 (鹞 鹰)
	འུག་པ།	Owl	猫 头 鹰
	ཐིུ་ཁ།	Sparrow Hawk	

6

Sixth category of animals; domestic animals	མིང་།	Name	名
	མཚེ།	Hybrid ox	犏牛
	གཡག་	Yak	牦牛
	ར་མོང་།	Camel	骆驼
	རྩ།	Horse	马
	ཚང་ལུ།	Donkey	驴
	ག་ལང་།	Cow and bull	黄牛
	རྩ་མ་ལོ། ལྷ་ལོ།	Tto-llei	
	རྩ།	Goat	山羊
	ལྷག་	Sheep	绵羊
	ཁྱི།	Dog	狗
	ཕག་	Pig	猪
	ཁྱིམ་ལུ།	Hen	鸡
	ཕ་ལོ། ཁྱི་ལོ།	Cat	猫

7

Seventh category of animals; underground animals.	མིང་།	Name	名
	བརྩེ་ལོ།	Marmot	旱獭
	ཁྱི་ལྷ་རྩ། རྩང་།	Hedgehog	豪猪 / 刺猬
	ལྷ་ལོ།	Frog	青蛙
	ལྷ་ལོ།	Snake	蛇
	ལྷ་ལོ།	Tibetan badger	獾
	ལྷ་ལོ།	Gecko lizard	壁虎 / 沙蜥
	ལྷ་ལོ།	Mountain lizard	蜥蜴
	ལྷ་ལོ།	Scorpion	螃蟹 / 蝎

8

Eighth category of animals; aquatic creatures	མིང་།	Name	名
	བྱ་བྱ་བྱ་	Crane	鹤
	རང་ལྷོ།	Wild geese	天鹅
	རྩ་ལ།	Red mallard	赤麻鸭
	མེ་བྱ། མེ་རྩ་རྩ་ལ།	Fishing bird	鸬鹚
	ལྷོ་མོ།	Egret	白鹭
	ལྷོ་མོ།	Otter	水獭
	ཉ།	Fish	鱼

The meat of all these animals has both a sweet and sweet digestive taste.

Aquatic creatures are subdivided in three groups: aquatic animals that live in dry areas. Those that live in damp areas, and those that live in both.

To the first group belong the crane and the goose. Their meat has cold, light and rough potencies, and cures fever caused by a combined imbalance of wind and phlegm.

To the second group belong fish. Their meat has oily, heavy and warming potencies, and cure digestive problems, kidney and pelvis problems and, help to wind imbalances that cause illnesses of a cold nature.

To the third group belongs the meat of the otter. Their meat cures fevers caused by phlegm and wind together, and wind imbalances that cause illnesses of a cold nature.

The meat of animals that catch their prey with agility and strength has rough, light and sharp potencies; it increases digestive heat, heal tumors, increase flesh and cures disturbances of cold nature.

The Table of Properties and Effects of Meats

Meat	Properties	Effect
Mutton	O, W	Replenishes physical vigor, cures wind and phlegm imbalances.
Goat	He, Cd	Cures the venereal, smallpox and burns, but to disturbance the three humors.
Cow Beef	Cd, O	Cures fever associated to wind imbalance.
Horse	W	Remedy for kidney and pelvis cold diseases.
Wild Ass	He, W	Remedy for kidney and pelvis cold diseases.
Donkey	W	Remedy for kidney and pelvis cold diseases.
Pork	Cd, Lt	Cures the wounds and dark phlegm.
Buffalo		Increases sleep and flesh.
Yak Beef	O, W	Cures cold disorders, but contributes to blood and bile disorders.
Chicken	W	Increases the amount of semen, restores weak bodily constituents, heals ulcers and wounds.
Sparrow	W	Increases the amount of semen, restores weak bodily constituents, heals ulcers and wounds.
Peacock		Cures eye problems, heals loss of voice, gives a youthful aspect to the elderly.
Wild Yak		Cures cold disorders manifesting in the stomach, liver and, increases metabolic heat.
Wild animals	Cd, Lt	Cures fevers associated to phlegm disorders.
Hare	R	Increases metabolic heat, stops diarrhea.
Marmot	O, He	Increases metabolic heat, cures kidney and pelvis problems.
Otter		Improves virility and, cures kidney and pelvis cold disorders.
Fish	W	Improves eye-sight, heals ulcers and wounds, decreases phlegm.

The meat from different parts of the animal's body have varying degree of heaviness and lightness. The meat of the head is the lightest in property. The heavy property increases progressively from the head to the neck, to the rib region, and finally to the lumbar region.

The heavy and light properties are variously distributed in the meat of the animals of the two sexes. In male animals the meat of the ventral part is heavy, and that of the dorsal part is light. The contrary is true for the meat of female animals. Yak meat, of the sheep and other male quadrupeds are heavy

in property; while that of female animals is lighter. The meat of all the different parts of the body of a pregnant animal is heavy. Meat of female birds is heavy while that of male is lighter. The degree of "heaviness" varies in their different physical constituents. The heavy property is stronger in the marrow and decreases progressively from the bones to the fat, to the flesh and to become minimal in the blood. Cooking and aging modifies some properties of meats. Raw meat cools while aged meat warms. Year-old meat has the unique property of sedating the wind humor, thus, it is a remedy for wind imbalance and in addition increases the digestive heat. Raw meat, frozen meat, and grilled meat are heavy and difficult to digest. Dried and boiled meat is more easily digested, and has a light property. Meat broths (except goat and pork) infuse a sense of satiety, invigorate the body, increases flesh, and heals wind disorders.

3)Oils, Fats and Dairy Products

Oils include butter, seed oil, marrow's and fatty tissue, which are respectively increasingly heavier and colder in property. They expel disorders of the humors through the lower part of the body. Oils are characterized by oily, blunt, subtle, pliant and moist properties. These properties replenish physical vigor in the elderly, contribute to the growth of children, and potentiate the physical constituents, remedy emaciation and leanness. They remove skin roughness, nurture male and female reproductive fluids, and are very effective in curing wind imbalances due to fatigue or wasting away of the body (caused by an excessive mental or physical activity) or diarrhea.

The Table of Properties and Effect of Oils and Dairy Products

Oils	Prop- erties	Effect
Fresh Butter	Cd	Stimulates virility, improves the complexion, improves the complexion, replenishes physical vigor.
Aged Butter	W	Helps in schizophrenia, forgetfulness, seizure and, heals ulcers and wounds.
Clarified Butter		Greatly sharpens intellect and memory, increases physical strength and, prolongs life.
Fresh Soft Cheese		Stimulates the appetite, causes constipation and increases phlegm.
Curd ¹		Stimulates the appetite, causes constipation and increases phlegm.
Cheese		Stimulates the appetite, causes constipation and increases phlegm.
Zo-mar ²		Cures phlegm and wind imbalance, improves digestive heat.
Butter of Dri		Has the general properties of butter and in addition cures cold wind disorders.
Sheep Milk Butter		Has the general properties of butter and in addition cures cold wind disorders.
Dzomo Butter		Cures wind imbalance.
Cow Milk Butter	Cd	Cures fevers associated with wind imbalance.
Goat Milk butter	Cd	Cures wind imbalance.
Aged Cow, Goat Milk Butter	W	Cures wind chronic disease.
Sesame Oil	Ho, Sh	Gives tone to muscle tissue, reduces slackening of the tissues and, cures wind and phlegm imbalance.
Mustard Seed Oil		Cures wind imbalance, but increases phlegm and bile.
Marrow Fat		Overcomes wind disorders, increases the amount of semen but also of phlegm.
Fat		Relives joint pain, heals burns and, helps to cure disorders of the brain, ears and womb caused by wind imbalance.

¹ Yellowish milk of animals that have just given birth² Buttery sediment from a milk churn

In brief, the general properties of oils and dairy products improve digestive heat, expel impurities of the three humors from the trunk of the body, develops rapidly the bodily constituents, replenishes physical vigor, improves skin complexion, and sharpens the sense faculties. In particular, they have the property of delaying old age and prolonging life.

4)Vegetables

Vegetables are classified according to their taste, essence, nature and characteristics.

1) Taste: Garlic, onions, and other pungent vegetables are warming and light, and help cure chronic diseases and cold disorders. Dandelion, sow thistle and other bitter greens are cooling and heavy, and help to cure acute diseases and hot disorders.

2) Essence: Vegetables that grow in dry places have hot and light properties, and help in the curing of (*chronic diseases*) and cold disorders. Greens that grow in damp places have a cold and heavy property, and help to cure disorders of (*Acute diseases*) hot nature.

3) Nature: Dried vegetables are warming and light, and help to cure (*chronic diseases*) cold disorders. Fresh vegetables have cold and heavy properties and help to cure (*acute diseases*) hot disorders.

4) Characteristics: Cooked vegetables with the addition of ingredients (*salt and oil, etc.*) that facilitate cooking, have a hot and light properties, and cure cold disorders. Raw greens have a cold and heavy property, and cure hot disorders.

The Table of Properties and Effect of Some Greens

Vegetables	properties	Effect
Onions	W	Increases sleep, stimulates appetite, cures phlegm and wind imbalances.
Garlic	He, Cd	Helps to cure sinusitis and wind disorders.
Fresh Radish	Lt, W	Increases digestive heat.
Stored Radish	He, Cd	Increases phlegm.
Turnip		Cures poisoning and increases digestive heat.
Mountain Garlic	He	Stimulates appetite.
Rhubarb		Cures phlegm imbalances and stimulates appetite.
Chu-Lo		Cures phlegm imbalances and stimulates appetite.

It should also be remembered that the vegetables mentioned above that have a warming or cold property cause obstructions in the channels and suppress the potency of medicinal herbs.

5)Cooked Food:

Cooked food consists of grains, meat, greens, assorted dishes and spices.

The Table of Cooked Grains and Meat

The Table 1

Cook Foods		Effect
Rice	Thin gruel	It helps to cure illnesses accompanied by thirst, helps emaciated persons, recover humors after purgatives and emetics, increases bodily constituents and digestive heat, gives tone to the blood vessels. <i>Thin rice gruel is very healthy when taken after a bath in a hot spring or after a purge.</i>
	Thick gruel	Increases digestive capacity, alleviates hunger and thirst, removes the symptoms of illnesses that cause emaciation and physical weakness; removes accumulation of phlegm and constipation.
	Porridge	Stops diarrhea stimulates appetite, helps to cure illnesses accompanied by thirst. <i>Thus, thick rice pudding and rice porridge is particularly indicated for the physically weak and for lean people.</i>
	Rice	Especially when boiled with medicinal herbs with a hot potency, such as ginger, long pepper, etc., is light and easily assimilated. Rice boiled with meat broth, or milk has a heavy potency.
	Toasted	It stops diarrhea and heals fractured bones.

The Table 2

Cook Foods		Effect
Barley	Soup of unripe	Clears away obstructions to the flow of nutrition but diminishes digestive heat.
	Soup of barley	Clears away obstructions to the flow of nutrition but diminishes digestive heat.
	Soup of toasted Barley	Toasted and crushed barley, has a light, smooth and warming properties and is thus easily digested.
	Tsampa	If taken dry or with cold water, has a heavy property and increases physical strength.
	Cooked Tsampa	It has a light and smooth property and thus easily digested.
	Dough Ale	It is greatly indicated in the curing of wind imbalance.
	Sour Ale	Essence of it stimulates appetite and cures imbalances of the three humors, but residue of ale doesn't have this effect.
	Soup of Dough	Cures wind imbalances.
Soup of Meat		Invigorates the body, satisfies appetite, cures imbalances and wind except Goat meat and pork.

The Table of Cooked Greens

Vegetables	Effect
Nettles	Heals wind imbalances, improves digestive heat, but increases phlegm and bile.
Mallow	Increases digestive heat and stop diarrhea.
Plantain	Increase digestive heat and stop diarrhea.
Lily Flower	Cures wind imbalance, heals ulcers and wounds, but at the same time increases phlegm and bile.
Wild Goosefoot	It is harmful to eyes but offers relief from constipation.
Red Goosefoot	Cures the imbalances of all the three humors.
White Dandelion	It has a cool property and remove hot disturbances.
Dandelion	It has a cool property and remove hot disturbances.
Dragonhead	Alleviates fevers and headache associated with bile problems.
Peas	Stimulates appetite, increases phlegm and wind, takes the oily property away from the body and, assists in the expulsion of indigested oils.
Young Turnips	Cures bile disorders, but increases phlegm and wind.
White Mustard Leaves	It agitates phlegm and bile.
Angelica Leaves	Heals phlegm and wind disorders.
Solomon's Seal	Heals phlegm and wind disorders.
Pungent Radish	Generates digestive heat and alleviates wind disorders.
Garlic	Cures wind disorders.
Onions	Cures wind disorders.

Spices: When added to food, stimulates appetite and makes dishes more tasty.

Spices	Effect
Salt	Stimulates appetite, increases digestive heat, makes food more digestible, and adds flavor to all foods.
Sichuan Pepper	Open blocked channels, but disturbs phlegm and bile.
Ginger	Generates bodily heat.
Asafetida	Alleviates wind disorders.

When both raw and cooked foods become stale and dehydrated, it causes weakening of the digestive heat. Fresh foods mixed with hot water or boiled into liquid soup are easily digested, and increase digestive heat.

Drinks

The drinks in the traditional Tibetan diet are milk, water and barley ale. Milk is a remedy for wind disorders, but at the same time increases phlegm. Water is a remedy for bile disorders, but at the same time increases wind. Barley ale is a remedy for phlegm disorders, but disturbs bile.

1) Milk

Most milk has a sweet taste and an identical digestive taste. Owing to its oily and heavy property milk develops bodily constituents; enhances complexion; cures wind and bile disorders; increases seminal fluid and virility. Owing to its cold and heavy property milk increases phlegm

In general, raw milk has a cold and heavy property, and can cause sinusitis and increase of phlegm and related disorders. Milk boiled with an equal property of water until water has evaporated acquires a light and warming property. Milk boiled without water and concentrated to half of its original measure is heavier and difficult to digest. The best of all is said to be warm fresh milk, which is akin to medicinal nectar. It activates the physical constituents and awakens intelligence.

Table of Milks

Milks	Effect
Cow's Milk	Counteracts tuberculosis, consumptive diseases, chronic infectious of diseases and diabetes; and alleviates breathing problems.
Goat's Milk	Cures asthma.
Sheep's Milk	Cure all wind disorders, but it is harmful to the heart.
Dri's Milk	Cure wind disorder, but harmful phlegm and bile disorders.
Mare's Milk	Cures lung diseases and strengthens the functions of the lungs, but at the same time diminishes one's intelligence and makes one dull.
Donkey's Milk	Cures lung diseases and strengthens the functions of the lungs, but at the same time diminishes one's intelligence and makes one dull.

Table of Other Dairy Products

Products of Milk	Effect
Yogurt	It stimulates appetite, cures constipation, and fevers caused by wind imbalances.
Lean Yogurt	Heals infectious diseases, colds, fever caused by contusion, fever aggravated by various conditions and diarrhea.
Cooked Yogurt	Hardens the stools and clears diarrhea caused by fevers.
Fresh Buttermilk	Increase digestive heat, assists in the healing of tumors and nodules, of spleen disorders; it is helpful in case of hemorrhoids and, indigestion caused by intake of fats.
Whey from Yogurt	Causes diarrhea softens the stools and purifies the channels.
Whey from Cheese	Dispels phlegm disorders and at the same time it is not harmful to the wind and bile humors.

In general, yogurt has a sour taste, sour digestive taste, and a cold and oily property. In summary, dairy products of the sheep and *dri* are warming and very nutritious; dairy product of cow and goat are cooling and light; dairy products of *dzomo* have a balanced property.

2) Water

Water is classified according to seven types, i.e. rain water, glacial water, river water, spring water, well water, salty or seawater and forest water. Rainwater is the best and the others decline in quality respectively.

Table of Categories of Waters

Table 1

Drinkable Waters	Source of Water and Effect
Rainwater	It is tasty though its flavor is indefinite. It is fresh and light and possesses the eight properties of good water. It quenches thirst and preserves health; thus, it is like medicinal nectar.
Glacial Water	If from a snow mountain that rushes strongly, hitting rocks and stones has an excellent quality. However, it is extremely cold to the touch and has the same intrinsic characteristic. It is harmful to the digestive heat, which cannot withstand such a low temperature.
Water from Lakes	It is not healthy and provokes bacterial gastrointestinal problems, elephantiasis and, heart disorders.
Slow Flowing Water	It is not healthy and provokes bacterial gastrointestinal problems, elephantiasis and heart disorders.
Pure Water	water from an unpolluted terrain, sunlit and windblown is very healthy for the body.

Table 2

Undrinkable Water	Source of Water and Effect
Swamp Water	Causes all types of diseases and thus is not drinkable.
Water Covered with Duckweed	That has very slow current and has slime on the surface, is also harmful for the body.
Polluted Water	Refers to ponds surrounded by grass, foliage and dark woodlands; water of deep underground sources covered at the surface; water of shady and non-ventilated places. These types of water cause many diseases.
Salty Water	Of lakes or seawater - not fit for drinking.
Water Polluted by Creatures	...such as crocodiles and other ghastly animals is not indicated for human consumption.
Water Polluted by Excretions	Such as feces, urine and other impure substances is not indicated for human consumption.

Drink water

Drink	Effect
Fresh Water	Which refers to drinkable water taken cold or sprinkled on the body is the first therapy in the case of fainting and fatigue, hangover, dizziness, vomiting, thirst and excessive bodily temperature, blood disorders and excess of bile, and in the case of intoxication.
Boiled Water	Improves digestive heat, eases digestion, relieves sighing, and is helpful in the case of phlegm disorders, abdominal distension, breathing problems, in the initial phase of a cold and, in the initial phase of infectious diseases.
Cold Boiled Water	Increases phlegm but alleviates bile imbalances. However, after a day, boiled water loses the strength of the fire element and turns slightly sour and becomes like a poison thus is unhealthy.

3)Alcoholic Drinks

In general, alcoholic drinks have a sweet, sour and bitter taste. In the digestive tract they assume a sour taste. Alcoholic drinks have sharp, warming, rough and subtle properties. They act as a mild laxative, warm the body, infuse it with courage, induce sleep, and alleviate phlegm and wind disorders.

Excessive intake of alcohol has unpleasant and harmful consequences: one's mental disposition is negatively effected, and one becomes careless and without shame. At first, alcohol produces a sense of well being, i.e. everyday worries vanish, and everything seems pleasant. In a second phase one cannot discriminate anymore between good and bad, and in the manner of a mad elephant, one talks and acts carelessly without giving a thought to accepted norms. In the last phase, one enters in a state of confusion and becomes almost unconscious like a corpse, incapable of discerning between good and bad, pleasure and pain.

New alcoholic brews have a heavy property; seasoned ones are light. Alcoholic brews, which have not fully-fermented, are smooth in property; they are easily digested and improves digestive heat.

The heavy property is progressively lower in alcoholic brews made with wheat, rice and barley. Alcoholic brews made with un-husked grain, that of wild barley and that made with toasted and crushed barley have a property that is far lighter than others. Aged alcoholic brews naturally turn slightly sour, and can help in alleviating blood, bile and phlegm disorders.

2 Unhealthy diet

Unhealthy food and drink cause imbalances of the three humors and contribute to illnesses that can lead to death. Thus, such unhealthy behavior is to be avoided in all circumstances.

Toxic Foods

Toxic or poisoned foods assume a color, odor and taste which is unlike their natural one. If toxic or poisoned food is burnt, it produces a blue smoke, with rainbow colors in the center, resembling the color of the feather of the peacock's neck; the flames do not blaze upward but scatter in every direction, and sparks fly far. When crows see this food, they caw; when peacocks see this, they feel happy; dogs vomit such food as soon as the dog's stomach is warmed by the poison.

Toxic meat takes on a very bright red color and looks swollen; it does not stick even to a red-hot iron. Cooked in alcohol, it produces a vapor that causes a burning sensation in the eyes and tears.

Incompatible Food Combinations

Because of their discordant potencies and properties when certain foods are prepared or mixed together they become like poisons. Let us see some examples:

The Following Combinations are to be Avoided

1. Yogurt not fully cultured and new alcoholic brew	9. Fresh butter kept in a bronze container for ten days.
2. Fish and milk	10. One should not eat ptarmigan (Tibetan bird) grilled on barberry wood
3. Fruits such as apricots, sea buckthorn and milk	11. Mushrooms after intake of calcite
4. Hen's eggs and fish	12. Drink cold water after taking clarified butter
5. Cooked peas and yogurt and sugarcane molasses	13. Meat kept for a day with milk, yogurt, or alcoholic brews or Tsampa
6. Mushroom cooked in white Mustard oil	14. Meat covered during cooking and eaten after one week
7. Chicken and yogurt	15. High tundra rhubarb or other sour vegetables with milk
8. Honey and an equal measure of sesame oil	

In addition, to eat before one has digested a precious meal, eating too much, eating foods that do not accord to one's constitution can cause humoral imbalances; eating food to which we are not accustomed and eating at improper times (for example, at midnight) gives foods a toxic potency which causes pain and can even create conditions which lead to death.

Permissible Exceptions

The aforementioned combinations of food are unhealthy. There are, however, exceptions. They include people whose work requires great physical effort; those who are used to consuming greasy food, persons with a strong digestive heat; strong and virile youths, and persons who have become accustomed to the aforementioned combinations. Such persons do not experience bad consequences by eating unhealthy food combinations. Nomads in Tibet, for instance, are used to eating raw meat, and the Chinese can safely eat any kind of creature (frogs, snakes etc.) without negative effect to their health. Therefore, habituation is a determinant factor.

When we want or need to eat food to which we are not accustomed, we should do so by gradually increasing their intake. Similarly, if we want to exclude certain foods (to which we are accustomed) from our diet, we should do so by gradually diminishing the intake of these foods. In this way we educate our body to the new diet. Abruptly changing our diet can result in an imbalance of the three humors.

3 Moderation in Diet

Food and drink are indispensable for the daily survival of our body. This is directly connected to our state of health. Thus, diet and moderation in consumption are the principal ways to maintain health and prevent diseases. Concerning this point, in *The Words of the Elder* we read the following:

Intelligent people who wish to live a long and healthy life should moderate their consumption of food. The proper amount of food is to be determined by evaluating the light or heavy property of foods we consume. Foods that are light and warming can be eaten until one feels satiated. An example would be tsampa (toasted flour of barley cultivated in dry areas) as well as wild game that lives in dry areas. On the contrary, foods that are

both heavy and cool should be eaten until they fill only half the stomach. In brief, eating in a manner so that food eaten in the morning is fully digested by evening and, food eaten in the evening is fully digested by dawn. Eating in this way will preserve one's health. Moderation in diet increases the digestive heat. Digestive heat is comparable to a field and the bodily constituents to the crops that grow in that field. When digestive heat functions properly, it prevents bad digestion and lack of assimilation of foods, which is one of the chief conditions that provokes illnesses of a consumptive nature. On the other hand, an insufficient diet leads to the wasting of the body and loss of strength and radiance. The first consequence of such wasting manifests as wind disorders. To eat in excess, on the other hand, increases the thick phlegm produced by bad digestion. This obstructs the pathways of the fire-accompanying wind. As a result, digestive heat is not produced sufficiently. This causes stomach problems and eventually consumptive diseases, and stiffness of the limbs (i.e., contraction and distension). Hence, judge the amount of food you eat on the basis of their light or heavy properties, and on the basis of the strength of your digestive heat.

The Exegetical Treatise states that "two quarter of stomach is occupied by food, one quarter by liquids; one quarter of the stomach empty." It means that a healthy person who does not undertake work requiring great effort should eat until two quarters (one half) the stomach is occupied by food, one quarter by liquids, leaving one quarter of the stomach empty. Youths with a strong digestive heat and individuals who do strenuous work can eat a little more than this.

Concerning the intake of water, drinking fresh and pure water after a meal gives a sense of satiety. It has the function of fragmenting the dense parts of food and making them liquid. It helps food to perform its nutritive function. In general, it facilitates digestion, helping the nutrition to reach all parts of the body, strengthening the body. Drinking fresh water after having taken yogurt, honey or other food which can cause some reaction to the organism, or alcoholic beverages, has the effect of preventing the problems or discomfort they may cause.

To drink water after a meal is not indicated for hoarseness, colds, with

severe catarrh, tuberculosis and in cases of all other disorders that manifest from the carotid artery and up.

To drink alcohol after having taken a meal of meat helps individuals with weak digestive heat to digest meat. Moreover, lean persons who want to gain weight should drink alcohol habitually though without reaching the point of drunkenness. Fat people who want to lose weight should drink throughout the day hot water with honey. To drink boiled water after a meal helps digestion and removes abdominal distension.

In general, to drink water before the meals helps to maintain a good tone of the flesh; to drink during meals makes one gain weight and to drink after meals makes one lose weight.

In summary, to eat in the proper measure helps the humors to flow in their own pathways without invading other locations. It also helps to increase the strength of the digestive heat. The body then becomes lighter, appetite increases, perceptive faculties of the senses become sharper, stools and urine are regularly and easily expelled, and the function of winds of the inferior part of the body is ameliorated.

Chapter XIV Behavior

1 Dally Behavior

Behavior is a decisive factor in maintaining our health and in ensuring a long life. Behavior is explained here under three headings: behavior that preserves life and prolongs lifespan, behavior conforming to social norms, and behavior conforming to spiritual principles.

Behavior that Preserves and Prolongs Life

Material that Preserves Long Life

(1) Medicine: It is believed that certain substances, worn on the body, have the power to ward off circumstances that may lead to physical and mental problems. Such "protective" substances include medicinal ingredients such as Chebulic myrobalan, Acorus calamus, Picture. White mustard, commiphora mukul, the so called 'precious pills' such as the "hot compound," the "cold compound," the "Nine black compound," worn around the neck and around the upper arm, these substances drive away the danger of contracting infectious diseases and epidemics.

(2) Precious Gemssuch as diamond, zi (*gzi* onyx), coral, turquoise, sapphire, star sapphire, ruby, emerald, khramen, agate can also be worn for the same purposes as necklace, earrings (and other head ornaments) or set on a small golden ornamental amulet-box, etc. Precious gems have the power to drive away the danger of seizures or strokesstrokes caused by malfunctions of the arteries, venous and nervous systems, whose symptoms manifest suddenly as in the case of the epileptic seizure caused by planetary influence.

(3) Other Materials: Other means of protection include protective cords and protective circles drawn on paper which realized tantric adepts have infused with power. It is believed that these amulets protect against nonhuman provocations.

Behavior that Preserves of Long Life. In addition to these means, to prevent illnesses one should be mindful of and shun the unhealthy diet and the improper behavior that contributes to humoral imbalances and disease. At the same time, knowing moderation and the limits of our capacity, one does

not engage in excessive physical exercise, does not speak in an excessive way, or does not make extreme effort in any mental activity. In the use of the sense faculties, one always shuns the extremes of excess and deficit. This means, on the one hand, one does not experience various sensations, both pleasant and unpleasant. The various forms of behavior are explained in detail as follows:

1) Shunning Risks: If you wish to live a healthy and long life, be mindful of where you go and where you stay. Avoid, for instance, entering a boat if you doubt whether it is suited for navigation or if you think it will sink. Do not ride an untamed horse, or other untamed animals. Do not wander in places where you can be killed (such as places where a battle is fought or where animals are hunted). Do not cross or swim across a wide river without having the necessary experience. Do not get close to a house or a forest that has caught fire. Do not climb on a tree during the winter season when the branches are dry. Do not go to flooded areas, next to a tottering house, in places where there are thieves and rogues, or places where there are wild beasts, next to landslides or ravines without having first verified that there is no danger for your life. In general, it is inopportune to go out at night. If you have an important reason for doing so, make sure you go out armed, accompanied by your own parents or courageous friends.

2) Sleep: If you do not sleep at night, this upsets the body and causes imbalances of the wind humor. Therefore, to remain healthy is important to sleep well. In the case of inadequate sleep, remedy this by sleeping half of the time you have missed at night, before you take breakfast. Sleeping during the day is harmful as it contributes to the arising of various illnesses. There are, however, exceptions. For instance, in the month of May and June when nature manifests its rough property and the day is longer than the night, weak persons and suffering persons, people exhausted by fatigue or by too much talking, people that have anxiety or fear, the elderly, or those who have hangovers should sleep a little during the day. People who are affected by wind disorders caused by weakness or loss of energy, can be helped by sleeping a little during the day, as sleep brings an oily, heavy and soothing quality to the ailing body and mind. In general, however, sleeping during the day increases phlegm and slackens the flesh, produces a whitish unhealthy skin complexion, and obscures the mind, causing headaches. It also induces laziness and contributes moreover to the arising of illnesses such as cold and flu. If sleep is excessive and heavy, remedy by taking emetics, fasting, having stimulating conversations and making love. These methods have the effect of making sleep lighter (*and normalizing it*) Drinking hot milk, eating

cooked yogurt, eating meat broths, and drinking alcohol can alleviate insomnia. These foods and drinks as well as massaging the body with sesame oil, particularly the head (*and then warming these spots a little*), and pouring a drop of oil in the ears, helps a person to sleep well.

3) Sexual Intercourse: To copulate with animals harms one's health and should be avoided. In engaging in sexual intercourse with women, one should follow norms that help to preserve the life. Avoid intercourse with married women, with unpleasant women, with a pregnant woman, or with a weak or a very unhappy woman. It is particularly harmful to have intercourse with a woman having her menstrual period. Such intercourse should be avoided because they harm one's health and may put at risk one's own life by depriving one of strength and radiance.

In the winter, when the quality of sperm and sexual desire increase, there are no restrictions on the amount of sexual intercourse. Sexual intercourse in this season will not weaken the body. In autumn (the months of September and October) and in spring (*the months of March and April*), sexual intercourse is allowed ten times in a month (*once every three days*). In the first and second part of the summer (May-June, July-August), it is advised to engage in sexual intercourse twice a month (*once every fortnight*).

If these rules are not followed, the power of the sense faculties (*beginning with the eyesight*) deteriorates, and leads to the progressive weakening of the physical energies that initially manifest as dizziness and which contributes to the arising of various illnesses and even to premature death.

4) Massage: Massage consists of the application of oil, rubbing and pressing the body at critical points. Massage and, in particular, that done with oils on the head, sole of the feet and the ear points has the general benefit of slowing down aging and curing wind imbalances. Massage followed by light physical exercise gives a sensation of physical lightness. It decreases the fatty tissue. It develops harmoniously the three humors, the seven constituents and the three excretions in their own locations. Massage eases their flow. It also helps to increase digestive heat, gives tone to the flesh, improves the power of the senses, and increases intellectual capacity.

However, excessive physical exercise or activity after a massage session can change into faults the benefits acquired. Thus, elderly people, youths and those who suffer from wind imbalance and bile in particular, should not do heavy physical activity after a massage session. There are, however, exceptions to the norm. These include people with great physical

strength, those who eat a great quantity of fatty foods, and those who have a phlegmatic type of constitution. In winter and spring, such people should engage in strong physical exercise or work after massage.

To mix perspiration with pea flour at the end of a session of massage (*and eventually to practice physical exercise*), prevents an increase of phlegm, diminishes fatty tissue, gives a luster to the skin, and makes the limbs flexible, but at the same time strong.

5) Baths: Though in general, the term for Tibetan term "khru" means bath, in Tibetan medicine it refers to baths in hot springs which are found throughout all various regions of Tibet. Different geological and mineral characteristics of the places where they are found determine the color and properties of the hot springs. There are five types of hot springs:

A) Hot springs situated next to a calcite deposit have a gray-whitish color and cures acute phlegm disorders, dark phlegm disorders, arthritis and other bone-related problems. B) Hot springs situated next to rock-pith deposit have a yellowish color and cures acute disorders of the stomach, of the liver, of the kidneys, and urination difficulties. C) Hot springs situated next to a sulfur deposit have a greenish color, cures skin problems, assists in curing leprosy, lymphatic disorders and illnesses caused by provocations, and at the same time dries festering ulcers and wounds. D) Hot springs situated next to a realgar deposit have an orange color and cure glandular malfunction, heals putrid ulcers and wounds; cures lymphatic and skin problems, kills viruses, heals from the consequences of bites of snakes, scorpions and mosquitoes. E) Hot springs situated next to deposits of various minerals have a mixed color and the property of the mineral preponderant in the area.

Hot springs have a multiplicity of benefits. They improve sexual potency and bodily heat, increase vigor, give physical radiance, cure skin eruptions, eliminate excessive perspiration and bad odor, eliminate boredom related to mental lethargy and dry skin, and cures muscular cramps. When bathing in hot springs, do not wash the head because hot spring water weakens eyesight and causes eye problems. It takes away the hair glow and causes loss of hair. Bathing in hot springs is not indicated for those suffering from diarrhea caused by fever, abdominal distension, colds, digestive problems, ears and eye problems. Moreover, such baths should not be taken right after a meal.

6) Eye Salve: Eyes should be well taken care of, as they are one of the most important parts of our body. The fire element is naturally predominant its quality can be injured by an increase of the water element of phlegm. If this occurs, once a week put a couple of drops of barberry extract in the eyes so as to cause lacrimation. In this way eyes are purged from phlegm

substances and the elderly too can preserve their eyesight.

7) Protective Medicines: Protective medicines are like a friend or courageous man that helps us on a journey protecting us from animals. They consist of those ingredients or compounds (mentioned above) that *The Medical Treatises* and instructional manuals define as antidote. The Exegetical Treatise states that worn on the body, the protective medicines ward off sudden illnesses. Earlier Tibetan doctors understood the five sudden illnesses in different and conflicting ways. A learned doctor (antecedent to Zurkharwa) stated that the five sudden illnesses refer to nose bleeding, glottis edema, block of the urine, peritonitis, and seizures from planetary influences. Zurkhawa and doctors after him identified the five as follows: infection of the tongues, of the stomach, of the calf, anthrax, and nose bleeding.

The opinion of the author of this book is that "sudden illnesses" refer to those disorders whose origin and distant cause lies in the provocations. This is because, on one hand, provocations are one of the four secondary causes for the arising of illnesses, and on the other hand, the commentaries on *The Medical Treatises* speak in unison of sudden illnesses caused by provocation. Five chapters of *The Instructional Treatise* discuss five groups of infectious and contagious diseases. These five groups could be the five sudden illnesses alluded to in the above passage and are caused by provocations. In Tibet, as a means to drive away infectious and contagious diseases and epidemic diseases, there is the custom of wearing on the body the so-called "protective circles" (a sort of mantra wheel). For the same purpose, medicines are worn on the body or eaten, and aromatic herbs or resins are burned. For instance, at the beginning of flu or of another sickness of this kind, one wears or eats musk, the pill "black compound 9," and the pill "garuda 5," etc. The so called "protective substances" mentioned in *The Exegetical Treatise* refer essentially to these medicines. The five chapters of *The Instructional Treatise* deals with the five following groups of infectious and contagious diseases: "balnad" (an acute flue), smallpox, gastroenteritis and common flu tongue infection and anthrax. These can be considered sudden illnesses because they are unleashed by sudden circumstances created by provocations. Concerning this point, *The Instructional Treatise* states the following:

Here are the secondary causes for the arising of infectious and contagious disorders:
In this lesser age of the last five hundred years,
motivated by greed humans engage in perverted actions;
Tantric practitioners murder each other;

monks create quarrels within their communities;
 Hindu, Buddhist and Bonpo curse each other;
 people swear the false, dispute, brawl, and accuse each other in courts.
 Upset, mamo and dakinis, release a vapor that forms clouds of illnesses.
 In this way, there are cone acute viral flu,
 gastroenteritis, tongue infection, anthrax, and smallpox.
 The natural course of the four seasons is overturned,
 and violence, bad odors, pollution, anger, pain and desire, joined by an unhealthy diet,
 disseminate infectious and contagious diseases.

In summary, to maintain health and to have a long life, follow not just one but all the forms of behavior just mentioned, applying them equally. In every circumstance, in the day or at night, while staying in a place or traveling, be mindful and discerning in what you do and what you plan to do. In this way, you will drive away the secondary causes that lead to physical and mental problems, and live a happy and prosperous life.

Behavior Conforming to the Good Norms of the World

A good education in the manners and behavior conforming to the norms of refined society is the foundation for developing one's qualities, and is important in order to maintain physical and mental health, too.

For the foundation of proper behavior there are the following norms: Always keep your words and promises. Once decided upon an action, it should be done, whether it is important or not, thus, making deeds follow words. If you become aware that the action you wish to do is socially unacceptable, avoid it, even though you have made a promise. Authentic actions are worth doing enthusiastically though one's parents or friends may be against it. Examine carefully what you intend to do beforehand so as to foretell what will be the outcome.

Don't believe everything people say, but accept the words of others only after having examined them in the light of reasoning. Similarly, think well before speaking, examining whether it is appropriate or not, and then speak in a clear and concise manner.

Do not pay attention to the calumnies of others, and remain in an unperturbed state of mind. Always tell the truth to those that love you and to those who have hopes in you.

Remain stable in your own character, but at the same time be sociable with the people in contingent situations. Answer the challenge of enemies without letting yourself be overcome by them; if in a given situation this

is not possible, search for the skillful and intelligent means to subdue your enemy in the future.

Be kind toward parents, friends, your relatives, and repay over a long period of time the kindness of the people who have helped you considerably. Honor your teacher, parents, uncles, aunts, the elderly and other persons worthy of respect.

Live in harmony with neighbors, parents and friends, and with people with whom you work. In accumulating wealth, be mindful also of the small things. In using your wealth be liberal and without avarice.

When you are wrong, acknowledge the defeat and in victory be satisfied without excitement, maintaining a sense of proportion. When you become famous because of your knowledge, give up pride and arrogance. When you become rich, be content with what you have.

Do not humiliate the weak and the servants, who are inferior in rank, and do not envy superiors. Do not rely on evildoers or people with bad character even though they may be superior to you in rank, take after them though they may be inferior to you.

Do not challenge one who practices mysticism, nor make friends with them. Do not covet other's wealth; respect the natural law of cause and effect. Undertake actions in a resolute way so that later you do not feel remorse. Do not give power to evildoers, be honest, have a relaxed disposition, great courage and an open mind and perform your duties at the right time.

By following behavior that conforms to the norms of the world and common sense you will have fewer enemies. You will not lose the power and the influence that you have acquired even though you find yourself acting alone, and though you are born as a servant, there is no doubt that you will become a leader.

Behavior that Conforms to Spiritual Principles

Ordinary activities such as farming, or doing business enable us to live and gain temporary well being. But, if we lack a deeper knowledge of spiritual principles, we can never obtain definitive well being. There are fundamental spiritual principles to which even lay people should conform. It is advisable to find a master and to listen to him or her with respect and appreciation, shunning false teachers and bad friends who distract us from the true quest. Put into practice the teacher's instructions, abstain from improper

physical actions (murder, theft, and from committing adultery); from the improper forms of speech (untruth, talking nonsense, offensive speech and slander) and from improper thoughts (covetousness, malice and perverted views).

Moreover, in accordance with your capacity, try to help those who suffer from physical or mental problems, the sick, the poor that lack food and clothing. Abstain from harming others.

Understand that, as we cherish our life, want to be happy, and wish not to suffer, all others, even the smallest insects, have the same desire.

Smile when you talk to others in a peaceful frame of mind, speaking frankly and without deceit. Do not hold grudges for your hateful enemy, but view him or her as a person in need of help. With loving kindness that does not discriminate among others cultivate the altruistic spirit of enlightenment and then transform it into concrete actions. On this basis practice generosity in material things, etc, without feeling any sense of loss. In brief, consider the welfare of others as if it were your own. This is noble behavior.

2 Seasonal Behavior

The Different Seasons

The cycle of increase and decrease of the four elements determines the changes that take place in the four seasons. The dynamics of the cycle of the elements of the body is connected to that of the external elements, thus, the body is influenced by the seasonal cycles. Hence, to maintain the right balance of the elements of the body on which health depend, adopt a diet and behavior that accord with the different season. In the course of the history of Tibet, the year has been divided in several different ways: in two semesters, three seasons, four seasons, and six seasons. Behavioral advice given in this section is in accordance with six seasons.

Table of the 4 Seasons

<i>Tibetan Month</i>	<i>Tibetan Nomad's Traditional Month</i>	<i>Western Month</i>	<i>4 Seasons</i>
Tiger month	Dog month	February	Spring
Hare month	Pig month	March	
Dragon month	Mouse month	April	
Snake month	Ox month	May	Summer
Horse month	Tiger month	June	
Sheep month	Hare month	July	
Monkey month	Dragon month	August	Autumn
Cock month	Snake month	September	
Dog month	Horse month	October	
Pig month	Sheep month	November	Winter
Mouse month	Monkey month	December	
Ox month	Cock month	January	

Table of Two, Three, Four and Six Seasons

<i>Western Month</i>	<i>Tibetan Month</i>	<i>2 Seasons</i>	<i>3 Seasons</i>	<i>4 Seasons</i>	<i>6 Seasons</i>
12. 21	Mouse	The sun goes northward	Winter	Winter	Second Winter
1.21	Ox	The sun goes northward	Winter	Winter	Second Winter
2.21	Tiger	The sun goes northward	Spring	Spring	Spring
3.21	Hare	The sun goes northward	Spring	Spring	Spring
4.21	Dragon	The sun goes northward	Spring	Spring	Soka
5.21	Snake	The sun goes northward	Spring	Summer	Soka
6.21	Horse	The sun goes south	Summer	Summer	Summer
7.21	Sheep	The sun goes south	Summer	Summer	Summer
8.21	Monkey	The sun goes south	Summer	Autumn	Autumn
9.21	Cock	The sun goes south	Summer	Autumn	Autumn
10.21	Dog	The sun goes south	Winter	Autumn	First Winter
11.21	Pig	The sun goes south	Winter	Winter	First Winter

In the Tibetan medical system, time is calculated in reference to the shortest instant, the unity of time defined as "a brief instant of thought." 120 shortest instants form an instant; 60 instants form a 1"esser period;"30 'lesser periods' are equivalent to a "period;" 30 "periods" are equivalent to a solar day, 30 solar days form amonth, two months form one of the six seasons of which a year is composed. In the unfolding of time there are "four cardinal points of time;" summer and winter solstices, autumn and spring equinoxes. According to the western calendar, the summer solstice occurs in most cases

on the 21st of June, the winter solstice on the 21st of December, the autumn equinox on the 21st of September, and the spring equinox on the 21st of March.

During the day of the two equinoxes, day and night are of the same length. Spring equinox falls in the day, which is exactly in the middle between the winter and summer solstices. Autumn equinox falls in the day that marks the exact middle between the summer and winter solstices.

The Elements Predominant in the Two Halves of the Year

Generally speaking, during the period from 21st December to 21st June, when the apparent motion of the sun turns north, the potency of the solar energy or the energy of the fire and wind elements increases. During the semester from 21 June to 21 December, when the apparent motion of the sun turns south, the potency of the lunar energy or the energy of the earth and water elements increase.

The potency of the water element reaches its apex in the coldest time of the winter when the potency of the fire element is at its lowest level. On the contrary, the potency of fire reaches its apex in the hottest time of the summer when the potency of water is at its lowest level.

Though the elements of fire and water, have opposite natures (*respectively hot and cold*), they can owe the nature of the earth and air elements which stand in the middle between the hot nature of fire and the cold nature of water. Earth and air serve as a bridge between the fire and water elements enabling the meeting of the two opposite natures. The earth element interacts with the water element diminishing its cold potency; the air elements interact with the fire element diminishing its hot potency. The potency of the earth and air elements reaches their apex, respectively, when the potency of the fire and that of water are at their lowest levels. At that time, fire and water can meet.

The year can be subdivided into the four seasons in relation to the cycle of the energy of the four elements: summer in which the fire elements predominate; winter in which the water elements predominate; autumn and spring in which predominate respectively the earth and air elements.

During the semester that begins with the winter solstice, in concomitance with the increase of the energy of the fire and air elements in the external environment, in the human body the flow of the solar (or red vital essence) intensifies in the right channel *roma*. In the external world and in the human organism the sharp, hot, rough and other properties of wind and fire increase. Paralleling that, the heavy, oily, cold and other properties of the earth and

water elements decrease. The potency of the pungent, astringent and bitter tastes (*that have lesser properties*) augment and with the passing of the days the strength of the human organism weakens and deteriorates.



During the semester that begins with the summer solstice, in concomitance with the increase of the energy of the earth and water elements, in the human body the flow of the lunar constituent (*or white vital essence*) intensifies in the left channel *lalana*. In the external world and in the human organism the heavy, oily, cold and other properties of the earth and water elements increase. Paralleling that, the sharp, hot, rough and other properties of the fire and wind elements decrease. In the humid months of this semester, rain and wind quell the heat of the earth surface. The potency of the sour,

salty and sweet tastes (that have higher properties) augment and the human organism acquires more strength with the passing of the days.

In summary, the seasonal cycle of the energy of the four elements reflects on the potency expressed by different tastes. Tastes influence positively or negatively the condition of the human organism. In the former semesters, the potency of the pungent (*fire and air*), astringent (*earth and air*) and bitter (*water and air*) taste increase. These tastes whose base elements is the same as those of the respective season, increase the vigor of the body.

The potency expressed by the taste (*and therefore their positive or negative effect on health*) is highest in those tastes whose qualities are concordant with those of the winter season, middle for those characteristics of autumn and spring, and lesser for tastes characteristics of the dry summer and humidity.

Table of Elements and Tastes Predominant in the Six Seasons Dominant

Seasons	Elements	Effective flavor
Second winter	Water wind	Pungent
Spring	Earth wind	Astringent
Soka	Fire wind	Bitter
Summer	Fire earth	Sour
Autumn	Fire water	Salty
First winter	Earth water	Sweet

Behavior that Accords with the Six Seasons

1) Behavior Conducive to the First Half of Winter

The natural quality of this season is not to disperse the energy of the fire element, and, thus, isolate the body from the outside. For this reason the pores of the skin close. The fire-accompanying wind increases the energy of the fire element, and the function of the digestive bile is quickened. In the apex of this season, this invigorates the body. One should eat foods that have mainly a sweet, sour, salty taste. This prevents the increased power of the digestive heat from harming blood and other bodily constituents (by subtracting from their liquid quality). In this season, when the night is longer than the day, one feels hungry in the first hours of the day. Hence, the diet should include nutritious and oily foods, and must include meat of good quality, bone broths, milk, molasses of sugarcane, and alcoholic drinks. The physical constituents must be nourished through massage with sesame or other seed oils. Use warm

clothes and shoes, and warm compresses such as animal fur. Remain next to sources of heat or in the sun for an appropriate amount of time. Live in a house where the floor is heated.

2) Behavior Conducive to the Second Half of Winter

The indications for the first part of the winter are applicable for the two months of the second part of winter when the weather becomes even colder.

3) Behavior Conducive to Spring

The intense cold of the winter condenses the humor phlegm. In spring the humor is warmed by the sun and is melted. This results in an increase of phlegm that can weaken the digestive heat. In this period, follow a diet that includes mainly foods with bitter, pungent and astringent tasters that have weak properties as well as light and rough properties. In particular, give a preference to old barley, meat of animals that live in dry areas, honey; drink boiled water and wild ginger decoction. Practice physical exercise, keep the body dry of sweet, using pea flour. Use massage and other methods to get rid of phlegm. Restore the body and the mind sitting in the shade in gardens adorned with various plants and flowers with a fragrant smell.

4) Behavior Conducive to the SOKA (Dry Summer) Season

The strong sun of this season weakens the body, therefore, follow a diet that includes mainly foods and drinks with a sweet, light, oily and cold properties. Wash in cool waters; take alcoholic drink adding a little bit of water. Wear light clothes of cotton or silk, live in a fresh house with a pleasant smell, sit in the shade of trees with many leaves; remain under the fine drizzle, in the soft breeze and in the midst of natural and light perfumes. Avoid salty, sour and pungent foods; do not practice physical exercises, and avoid staying too long in the sun.

5) Behavior Conducive to the Humid Summer Season

In this season, a rain makes the earth humid and increases the air element producing a refreshing sensation. The atmospheric and environmental conditions characterized by humidity and muddy water weaken the digestive heat. To prevent bad consequences for one's health assume foods and medicines such as "pomegranate nutritional distributor" that reinforce digestive heat. Follow a diet that includes mainly sweet, sour and salty foods with light, warming and oily properties. Take alcoholic drinks made by fermenting grains grown in dry areas. Dwell in places and houses free of humidity, such as the upper floors.

6) Behavior Conducive to the Autumn

The accumulation of the bile humor that takes place in the humid summer season because of the heat and of the sharp and oily property of the climate does not cause illness because it is balanced by the refreshing quality brought about by the rain and wind. Bile disturbances, however, manifest in autumn characterized by the oily and warming property. To prevent such disorders, follow a diet that includes mainly foods and drinks that have a sweet, bitter and astringent taste. Wear cloths perfumed with camphor, sandalwood or blue poppy. In the house you live, sprinkle drops of fragrant saffron water and relax.

In summary, in winter and the humid summer season wind disorders manifest because of the cold climate. To prevent such disorders follow a diet that includes mainly warming foods.

Spring is the season in which phlegm disorders manifest. To prevent such disorders follow a diet that includes mainly foods and drinks that have a rough property.

In the SOKA (dry summer) season the environment is permeated by a sharp, hot, and rough property that suppresses the lunar energy of the earth and water elements. To SOKA (dry summer) season and autumn are, therefore, the periods that predisposed to bile disorders. To prevent and cure such disorders, follow a diet based principally on foods that have a cool property.

In various seasons, it is advisable to consume foods with the taste that is an antidote to the humoral imbalances that manifest in specific seasons.

In the humid summer season and in winter, take principally sweet, sour and salty foods. In the spring take mainly bitter, pungent and astringent foods. In the SOKA (humid summer) season, take foods that have a sweet taste and in autumn foods with sweet, bitter and astringent taste.

Similarly, follow the therapies that are appropriate to the humoral disorders that manifest in a specific season. In autumn, take purgatives that expel bile humoral disorders. In spring take emetics that expel through vomit phlegm humoral disorders. In the summer season take suppositories that eliminate wind disorders. If these therapies lead to the undesired effect because of excess, deficit or because they are not indicated, that is to say if they generate another disorder, follow the diet and treatment appropriate for that disorder and stop the preceding therapy.

3 Occasional Behavior

Suppression or Retention of Natural Functions

The natural function of the organism must take place normally without being suppressed or retained. These functions refer to: hunger, thirst, vomiting, sneezing, yawning, breathing, sleeping, expectoration of mucus, lacrimation, defecation, flatulence, urination, and emission of semen. Forcefully suppressing these functions leads to unhealthy consequences.

1) Suppression of Hunger

Suppression of hunger causes dizziness, physical weakness, loss of appetite, and eventually to death. Remedy these consequences by gradually eating again, beginning with light, oily and warming foods.

2) Suppression of Thirst

Suppression of thirst causes thirst, dizziness, heart ailments, and mental confusion that resembles craziness. Remedy these consequences by drinking cool water and applying hydrating methods.

3) Suppression of Vomit

Suppression of vomit leads to loss of appetite, difficulty in breathing, anemia (accompanied by swelling of the body), erysipelas, skin eruption, tumors, leprosy, disorders of the eyes, catarrh, infectious and contagious diseases. Remedy these consequences by fasting, inhaling the smoke of toasted barley flour, juniper or "eaglewood," and by rinsing the mouth with fresh water.

4) Suppression of Sneezing

Suppression of sneezing causes lack of clarity of the senses, headache, stiffness of the spine making back movements difficult, facial paresis, loss of mandibular functions (causes by wind imbalance). Remedy these consequences by inhaling as before, by taking the appropriate medicine administered through the nose and by looking to the sunrays and by applying the general treatments for wind disorders.

5) Suppression of Yawning

Suppression of yawning causes lack of clarity of the senses, headache, stiffness of the spine making back movements difficult, facial paresis, loss of mandibular functions. Remedy these consequences by applying the general treatments for wind disorders

6) Suppression of Breathlessness

Suppression of breathlessness after a physical exertion may cause tumors, heart ailments, and loss of memory. Remedy these consequences by taking rest after a physical exertion and by applying the general treatments for wind disorders.

7) Suppression of Sleep

Suppression of sleep causes yawning, physical lethargy, heaviness of the head, dimness of vision, and difficulty of digestion. Remedy these consequences by drinking meat broths, and alcoholic beverages of good quality, apply massage and sleeping.

8) Suppression of Expectorations

Suppression of expectoration of mucus leads to an increase of phlegm, breathing difficulty, loss of weight, hiccups, heart ailments and loss of appetite. Remedy these consequences with the therapies and medicines that reduce mucus such as molasses of sugarcane with the addition of ginger and long pepper.

9) Suppression of Lacrimation

Suppression of lacrimation causes headache, loss of mucus from the nose, dizziness, and loss of appetite, heart ailments. To remedy these consequences drinking a little bit of alcohol, sleeping, and having nice conversation with friends.

10) Suppression of Farting

Suppression of the emission of intestinal gas causes dryness of the feces, constipation, tumors, abdominal distension and stomach pain, decrease of eyesight and of digestive heat, heart ailments and flatulence.

11) Suppression of Defecation

Suppression of defecation can result in impure residue of foods emerging in the mouth, cerebral disorders, cramps in the legs and harms, colds and, the same faults caused by suppression of intestinal gas.

12) Suppression of Urination

Suppression of urination leads to formation of stones, gum ailments, diseases of the male and female sexual organs, and to the same faults caused by not expelling gas. Remedy for the consequences caused by suppressing the expulsion of intestinal gas, defecation and urination, by suppository made with the appropriate ingredients include baths in hot spring, medicinal baths by the five nectars, with massage, hot compresses, and medicinal butters.

13) Withholding of Semen

Withholding of semen causes loss of semen, pain in the penis, blockage of urination, formation of kidney stones and impotency. Remedy these consequences with appropriate suppository, medicinal baths, baths in hot springs, by having sexual intercourse, and a diet that includes sesame oil, milk, good quality chicken and alcoholic drinks.

Occasional Therapies

The following indications on how to maintain a healthy condition or regain health when following a disruption caused by contingent events, such as the seasonal changes and the temporary suppression of the physiological function.

To suppress the natural stimuli to drink, eat and sneeze, etc., causes an imbalance of the wind humor. To avoid such imbalance, consume foods or medicines that remedy wind disorders.

Often illnesses can be temporarily resolved with fast and pacifying therapies. But, if the illness has not been completely eliminated, it can manifest again, therefore, one must use emetics and purgatives. The humor of phlegm accumulated during winter gives rise to illnesses in spring. It is in this season that one must use emetics in order to eliminate phlegm disorders through vomiting.

The humor of wind accumulated during the dry summer season gives rise to illnesses during the humid summer season. It is in this season that one must use suppositories that cure wind disorders. The humor of bile accumulated during the humid summer season gives rise to illnesses during autumn. It is a good norm to apply these remedies yearly, in the appropriate season, in order to eliminate the "residue" of illnesses and remain long in good health.

In summary, follow a diet and a behavior after having evaluated them in regard to the season and environment you are living in. If you do not feel confident in your judgement on such matters, ask the advice of qualified doctors. In this way, you can cure the illnesses you have and shun those that arise suddenly. For these reasons occasional behavior is of definite importance.

Chapter XV

Therapeutical Principles

1 Introduction to Therapeutic Principles

Therapeutic Principles for all Diseases in General

Tibetan Medicines has more than three hundred and sixty therapies. But, if the principles that underlie them are not understood, to practice medicine is equivalent to shooting an arrow to a target in the dark, and none of the therapeutic methods applied will really be effective.

The Procedure:

The first principle is to prevent the accumulation of the humors (*wind, bile and phlegm*) in the season that predisposes condition. The wind humor, for instance, accumulates in the SOKA (*dry summer*) season, but, it is in the humid summer season that wind disorders manifest and aggravate. Since wind disorders can lead to an imbalance of the other two humors, the treatment should be directed not only to cure the former wind disorder, but also to cure the latter bile or phlegm imbalance. In applying the therapies one must examine the seriousness of the former and latter illness, and one must first treat the illness which is most serious.

The Methods:

The second principle concerns pacifying and cleansing medicines that are widely discussed in the Tibetan medical books. Pacifying medicines are to be administered when the humors are in the phase of accumulation. Cleansing medicines (*such as emetics and purgatives*) are given when the level of one or more humors is modified to such extent as to manifest as illness. When an illness is about to be cured, give primary importance to the diet and to the behavior, administer mild medicines that do not cause imbalance to the various humors.

In general, humors accumulate and manifest as illnesses only in specific season, however, in certain cases, because of sudden circumstances, illnesses accumulate and arise in seasons that are not the usual ones. Such illnesses are not to be neglected. If not treated timely, such illnesses are difficult to cure because they become complex pathologies involving the combined imbalance of the three humors and can lead to death.

In administering pacifying medicines, consider the time of the day in which the particular humoral imbalance manifests a principle valid also for foods. Different medicines are administered in different moments of the day and particularly in relation to meals:

1) Before breakfast and on an empty stomach for phlegm disorders and for combined imbalance of all the three humors.

2) Immediately before meals for disorders caused by the malfunction of the downward purgative wind.

3) In the middle of meals for disorders caused by the malfunction of the fire accompanying wind.

4) Immediately after meals for disorders caused by the pervasive wind.

5) Between a mouthful and the other for disorders caused by the malfunction of the life sustaining wind.

6) Half an hour after the meals for disorders caused by the malfunction of the ascending wind and for most diseases.

7) Repeatedly in various moments of the day and in small doses for breathing problems and catarrh.

8) Mixed with the food to stimulate appetite.

9) Right before and after the meals for some problems such as hiccups.

10) Before bed for illnesses that manifest from the chest upward.

Many doctors administer medicines only in relation to the digestion (*usually half an hour before or after the meals*). Such prescription shows incompetence: the efficacy of medicines is strictly connected to the time of their administration in as much as the different illnesses manifest themselves in different periods of the day. Nowadays, most Tibetan doctors give medicines with the advice to take them in the morning before breakfast, in the evening before going to bed, and whenever is more convenient, before or after lunch. They say that medicines taken right after a meal are not effective.

Unfortunately, this incorrect procedure has become more and more common, and accepted. In Tibetan medical texts it is explained that in the course of the day the substances of the three humors move in cycles of increase and decrease. Therefore, each humor has its peak in different moments of the arch of the twenty-four hours. The medicine that counteracts the effects of a particular humor should be given when the humor is at its peak. Phlegm reaches its peak in the morning, bile at mid-day, and wind in the evening. In conclusion, in prescribing medicines as well as diet, consider the waxing or waning phase of the moon, the type of imbalance, its location

in the body, and its relation with the season. The ancient Tibetan doctors carefully examined all these circumstances.

Determining Recovery:

The third principle concerns the way to determine if an illness is subsiding or not. An illness is in course when, despite the therapy, it is still 'spread' in the body and the following symptoms manifest: abundant salivation, mucus from the nose, physically heaviness, lacks appetite, difficult digestion, reduced quantity of feces and of urine (*or irregular in expelling feces caused by the wind humor's disturbance to the organism*), physical weakness and low tone of the voice. The illness is in its way to recovery when it is 'collected;' that is to say when the humoral imbalances is pacified. The symptoms are the opposite of the preceding phase, but, the therapy is not to be discontinued until the total recovery. The treatment should be continued until the illness has completely subsided, and stops when it has. To continue the treatment once the illness is cured could cause the arising of new illnesses.

Therapeutic Principles for Specific Problems

Lack of Proper Assimilation of Nutrition

A decrease of the digestive heat and result in bad digestion and improper assimilation of the nutrients cause lack of proper assimilation of food's nutrition in the first place. Nutritious and residue of foods mix with the three humors and the seven bodily constituents through the gross and subtle pathways of the body. The first line of treatment consists in administering a decoction whose function is to make the illness fully manifest and at the same time to administer medicines such as the so called "Pomegranate nutrition distributor" (*that increase digestive heat*). Once the illness is pacified or collected, one will notice the signs that the organism regains the capacity to separate the nutrition from the waste and, thus, digest and assimilate nutrition properly. At this point you should apply the cleansing treatment using emetics or purgatives, depending on the location of the humor to which the disease is associated. One should not suppress with medicines vomit or diarrhea that may occur spontaneously in the course of the pacifying treatment. If you do that, as in the case of stopping a diarrhea when the fever that has caused it is not fully manifested, the problem will re-occur. Cleansing treatment is to be done only when the illness is fully manifest. Till the illness remain 'adherent' to the seven bodily constituents, the cleansing cathartic therapy will not be

effective and can also be harmful because of the medicine, and will also purge the functional parts of the physical constituents. It is like adding water to a fermenting brew: the alcohol level remains low and the quality of the fermenting cereal deteriorates.

Treating a Single Humor

All illnesses linked to the imbalances of a single humor are in ultimate analysis caused either by a wrong diet or a wrong behavior. Such diet and behavior cause the disharmony between wind, bile and phlegm, and the accumulation of one of the humor in its natural location. This condition can last long time without giving rise to a real pathology. The illness arises only when all the predisposing conditions (*diet, behavior and season*) are coinciding. The disorders of the single humors are all "sparked" by the humor of wind. Wind "activates" the humor that has accumulated and spreads it throughout the body. The first therapy to apply consists of a diet that sedates the humor of wind, and at the same time increases the strength of the digestive bile. In this way the activity of wind is neutralized, and the illness is brought to "maturity" or "collected." That is what happens for atmospheric events when, before rain comes, the wind must subside. In a successive phase, you proceed to the cleansing therapy with emetics or purgatives. For illness that has not collected in the inner part of the body and is present on the skin, limbs and other surface parts of the body, cleansing is effected by blood letting or with medications that cleanses the channels.

Treating Combined Humoral Disorders

Combined humoral disorders refer to new disorders that develop from illnesses already present. They are also defined as "additional disorder." For instance, if a wind disorder develops on the basis of a bile disorder, the wind humor invades the location of the bile. The bile humor, chased from its place, shifts and invades the location of one of the other humors. If the wind disorder attached to the one of the bile is not a serious one; you should treat first the bile disorder. The wind disorder will naturally subside because when the conflict between bile and wind ceases, the wind humor spontaneously leaves the location of the bile it had invaded. If the wind disorder poses strength, treat it first. In general, it is not necessary to treat a bile disorder that will naturally subside much in a manner as when, at the

death of the enemy who has occupied the country, the inhabitants can happily go back to their homes.

Special Therapeutic Methods

Tastes "Like a Creeping Cat "

The physician who has not yet understood the nature of an illness should proceed like a creeping cat. The successful treatment and healing of a disease depend on an accurate diagnosis based on pulse taking, urine observation, and examination of the symptoms. If for some reason, you cannot diagnose precisely the illness and you are in doubt, before proceeding in the main treatment, do a preliminary test so as to ascertain the nature of the disease by administering medications indicated for the illness you suspect. The following are some examples:

1) To test for diseases caused by wind, give the patient a little broth of ankle-bone, and if the diagnosis is correct, symptoms will be alleviated, otherwise they will aggravate,

2) The test for diseases caused by bile is a decoction of Chirata;

3) The test for diseases caused by phlegm is a decoction of Sallucidum 3, (*Sallucidum Chebulic myrobalan and Ginger*)

4) The test for intestinal infections is the "Garuda 5." 5) The test for high blood pressure or sharp pains caused by wind imbalance is the decoction of Elecampane 4. 6) The test for diseases caused by compounded poisons are decoctions whose function is to collect the disease.

7) The test for diseases in which heat and cold are intermingled is a diet and behavior of hot or cold nature. If the disease is of a cold nature, its symptoms will worsen with a cold diet and behavior, and vice versa for the hot disease.

8) The test for the efficacy of a purgative is a mild purgative decoction.

9) The test for the efficacy of moxibustion is a warm oily compress.

10) The test for the efficacy of blood letting is the placing of a cold stone or cold water on the skin.

11) The test indicating that the pus is ready to be extracted from a swelling is by pressing an eyed sty. If the emerging circle is whitish, pus is ready; if it is reddish, pus extraction is premature.

In conclusion, in any case in which the diagnosis is uncertain, one must proceed like a creeping cat, giving first a small dose of the medicine for the

illness one suspects, and if the medicines show some effect, start the actual treatment.

A Silk Banner Hoisted on the Top of a House

The physician who has made a firm diagnosis certainly knows the illness well. In other words, when the doctor has clearly diagnosed the illness, he must be able to indicate its nature (*hot or cold*), the causes and contingent conditions that have proved it, and its location in the body. The doctor must also be able to decide on the most adequate treatment and foresee the time needed for the recovery, or if the illness is incurable, when it will give its fatal outcome. Such knowledge must be evident as silk banner hoisted on the top of a mountain or a house.

Like Goading an Untamed Horse Along

When an illness does not respond to medications, proceed as though goading an untamed horse along, according to a line of treatment in which at first the illness is made fully manifest, "collected" and then separated from the physical constituents. For example, if you treat a fever that is not fully manifested with a medication of a cold nature, this could cause a combined imbalances of phlegm and wind (*whose nature corresponds to that of the medication*). This imbalance aggravates the fever. In this case, you should first apply a therapy that removes the combined imbalance of the two humors, administering, for example, the decoction of "Elecampane 4" that separates the humor phlegm from the humor wind. After that you can apply the specific treatment for the fever.

Similarly, in disorders of the blood, you must start the therapy by giving the decoction of the three Myrobolans whose function is to separate the impure from the pure parts of the blood. Only after you proceed, it is suitable to perform bloodletting. Because the blood is mixed with all other physical constituents, as milk to water, the impure blood is not separated from the pure blood; by doing blood-letting of also the pure blood, indispensable for the body, is extracted, thus, causing the aggravation of the illness and harming the physical constituents.

In the case of disorders called of the "dark phlegm" (*such as the inflammations to the digestive apparatus*) and of fevers caused by poisoning or intoxication, before the specific treatment is applied, the illness must be collected using medications intended for that purpose. If you give the specific medications

before the illnesses are collected, these will disperse throughout the body making the recovery more difficult.

In the treatment of the hidden fever, i.e., the fever that is masked under cold symptoms, first you should apply a hot therapy directed to the elimination of cold diseases. If you do not follow this procedure and give cold medications from the start, the potency of these medicines is absorbed by the disorder that has the same nature, and the therapy is not effective on the fever.

Also in various forms of lack of assimilation of nutrition, first you must make the disorder fully manifest by using medications that increase the digestive heat and create the favorable conditions for the efficacy of the specific treatment. It is only when the signs that indicate the illness is on its way to recovery, that the cleansing therapy can be applied. This treatment will be based on emetics and purgatives. It should be remembered that set in motion the disorder should be given before the purgatives, neglecting this procedure the cleansing therapy will have no effect, like water poured on ice.

Like the Egret that Carefully Look for the Fish

When the patient has unsuccessfully been treated by another doctor, it is necessary to understand if the therapy was the wrong one, was excessive or insufficient, and then to modify it accordingly: to change it is wrong, to increase it is insufficient, and to treat eventual new diseases that have occurred because of an excessive treatment. Behave unerringly like the egret that carefully looks for the fish, and then immerses itself in the water, reemerging with the fish.

Like the Enemy Met on a Narrow Path

Very serious illnesses of a hot nature (*such as a serious fever*) are treated with the "four cold remedies." The remedy of the "cold medicine" (*camphor added to barley ale*); the remedy of the "cold external therapy" (*bloodletting to the jugular veins for instance*); the remedy of the "cold diet" (*based on light and low-nutritional foods*) and the remedy of the "cold behavior" (*living in cool places for instance*). Very serious illnesses of a cold nature are treated with the "four hot remedies." The remedy of the "hot medicine" (*various medicines that have a hot nature*); the remedy of the "hot external therapy" (*moxibustion made with herbs or metal instruments*); the remedy of the "hot diet" (*based on food with warming and nutritious properties*) and the remedy of the "hot behavior" (*living in warm places*). The four remedies must always be applied together. Otherwise, the illness may lead to death caused by not hitting quickly with any weapon or object a deadly enemy met on a narrow path.

Like Scaling the Rungs of a Ladder

Light illnesses, of cold or hot nature, should be first treated, like scaling the rungs of a ladder, with advice concerning behavioral changes. If this is not sufficient to bring about a remission of the disease, advice the appropriate diet that avoid harmful foods and include those beneficial for the disorder. If the illness is not cured by the dietary prescription administer cold or hot medicines depending on the nature of the disease, and if even this method does not work, apply external therapies.

Like a Hero Vanquishing an Enemy

Disorders caused by a single humor should be cured like a hero vanquishing an enemy, with medicinal compounds indicated for that humor but that at the same time not causing imbalance of other humors. Otherwise, this will generate one of the pathologies from improper treatment. The therapy must take into consideration the effects it may have on all the humors, even those not directly involved in the illness.

In wind disorders, bitter or hot foods and medicines (that have the same property as the wind humor) do not alleviate the disorder, and on top of that they cause a phlegm imbalance (*because of the bitter taste*) and a bile imbalance (*because of the pungent taste*).

Similarly, in bile disorders, salty and pungent foods or medicines do not alleviate bile problems and on top of that they cause an imbalance of phlegm (*because of the salty taste*) and an imbalance of wind (*because of the pungent taste*).

In phlegm disorders, bitter and salty foods as well as medicines do not alleviate the phlegm disorder, and on top of that cause a wind disorder (*because of the bitter salt*) and a bile disorder (*because of the salty taste*). In conclusion, the discordance between the characteristics of foods and medicines consumed by the patient can cause the manifestation of illnesses caused by the three humors together.

An excessive treatment of a single humoral imbalance will cure the humor in question, but will give rise to imbalance of other humors. For example, an excessive intake of sweet or salty foods and medicines alleviates wind disorders, but at the same time the sweet taste increases phlegm and the salty taste increases bile. Similarly, pungent and sour tastes alleviate phlegm imbalances, but at the same time the pungent taste increases the wind humor and the sour increases the bile humor. The sweet and the bitter taste alleviates bile disorders, but at the same time the sweet taste increases phlegm, and the bitter increases wind.

Like Acting as the Mediator

In the case of combined disorders of two or three humors, adopt a therapy that re-establishes the balance between the humors. Chebulic myrobalan and rock-pith are among the best ingredients with a re-balancing effect. To these ingredients add other ingredients suitable for specific disorders, such as nutmeg for heart ailments; bamboo pith for lung problems; saffron for liver hepatic problems; cloves for disorders of the three vital channels (aorta, cava and spinal fluid); cardamom for kidney disorders; cubeb for spleen disorders; pomegranate and long pepper for digestive problems; chirata and *Herpetospermum* (*gser gyi me tog* གཤེར་གྱི་མེ་ཏོག) for bile disorders; nutmeg, moonseed, broth of Talus, sacrum and Scapula bones for wind disorders; Elecampane, coriander and the Chinese quince for phlegm disorders; *Corydalis impatiens* and *Lagetis yumnanensis* for blood disorders; amber, Cassia tora (*thal dkar rdo rje* ཐལ་དཀར་རྡོ་རྗེ) and *Abelmoschus moschatus* (*gu gul* གུ་གུལ) for lymphatic disorders; musk for infection conditions; Black commiphora mukul (*gu gul*) for illnesses caused by provocations.

If all the disorders just mentioned are present, you should include all the additional ingredients in the medicine. When the disorders of two or three humors have an equal level of imbalance, the medicines used as remedy should contain in equal measure ingredients of a hot and cold nature. When the level of imbalance of one ingredient is higher, the medicines should also contain in major quantity the ingredient indicated for treating the major imbalance or administer at alternate days the medicines indicated for the different humoral imbalances. It is also possible to administer the different medicines for the different humors in a single compound, thus treating simultaneously the imbalance of the different humors.

It should also be remembered that medicines (*or foods*) of a cold nature indicated for the treatment of bile disorders, should be taken at mid-day and mid-night when the substances of hot nature (that constitutes the bile humor) reach their peak. Medicines (*or foods*) of a hot nature indicated for the treatment cold disorders (*including those which increase digestive warmth*) should be taken in the morning and in the evening (19-21), when the cold substances (*that constitute the phlegm*) humor reach their peak. Medicines indicated for wind disorders (*that do not cause other humoral imbalances*) and warming and nutritious foods (*also indicated in wind disorders*) should be taken in the late afternoon, (17-19) and at dawn, when the substances that constitute the wind humor reach their peak. In summary, we can say that, excess of a humor leads to the imbalance of the other humors. In this case, you should administer medicines

that like a chief are able to reconcile a dispute between brothers (*caused by the different consideration their parents accorded to them*) by subduing the humor that is in excess. Deficit of a humor harm and impoverish the physical elements because the humor in deficit cannot sustain or help the functions of the other humors, thus, the strength and functions of that humor need to be increased.

Moreover, apply the four lines of treatment (*diet, behavior, medications and external therapies*) in a way as not to harm the body and its constituents, and at the same time, prescribe medicines to increase the digestive warmth, since the stomach is comparable to a field on which the physical constituents grow. We will be worthy of being called doctors only when, knowing how to recognize all illness and all symptoms, we are able to prescribe the appropriate treatment.

Different Objects to be Used as Different Antidotes

In the diagnosis and treatment of various illnesses, the doctor should gather, and carefully examine all data concerning the patient and the illness. These are included in the following ten points:

- 1) The condition of the seven bodily constituents and that of the three excretions;
- 2) The climate (*dry, humid or variable*) of the area where the patient lives;
- 3) The period of the year (*cold, hot or humid seasons or one of the four seasons*) in which the illness is manifested;
- 4) The humoral type to which the patient belongs (*single, double or triple*);
- 5) The age of the patient (*youth, maturity or old age*);
- 6) The nature of the disorder (*wind, bile or phlegm*);
- 7) The location of the illness (*upper, lower or middle part of the body; the skin, internal organs or intermediate areas*);
- 8) The degree of the digestive warmth (*weak, strong or balanced*);
- 9) The habitual physical energy of the person; its variations according to the seasons and through the therapies, food or relaxation;
- 10) The ability to get accustomed to new circumstances (*that may be strong, weak or middle*).

If these elements indicate in a concordant way, and beyond doubt the characteristics of a certain humoral imbalance, apply the remedy in an intense way. If in the opposite case, the ten elements do reveal in a concordant way the imbalance of a specific humor, that is to say, when some elements are concordant and others are discordant, consider the elements which from a diagnostic perspective give the clearest indications. Then apply the

appropriate remedy: a strong treatment for a serious illness (*like a heavy load carried by a dzo*) and a mild treatment for minor disorders (*similar to a lesser load carried by a sheep*). If the remedy is not proportioned to the entity of the illness, because of its excess, deficit or because it was wrong, it can lead to unwanted consequences.

2 Two General Methods of Cure

Different methods can be employed in dealing with diseases, but for all diseases, in general, you can apply one of two large methods: the anabolic treatment to invigorating the body and the catabolic treatment that helps to reduce excessive weight.

Methods of Invigorating the Body

The Object of Invigoration

Patients requiring anabolic treatment include persons with a natural excess in the wind humor, with depleted bodily constituents, psycho-physical depletion due to frequent and intense sexual intercourse (*as newly weds*), pregnant women and women that have just given birth, those who have suffered loss of blood or hemorrhages, people sick with tuberculosis, the elderly, those who suffer from insomnia, those in grief, those who practice asceticism, those who are psychophysically exhausted from excessive work. The best season to apply this therapy is during the dry summer season.

Methods of the Treatment

First, the diet: The anabolic therapy consists in diet, behavior, medications and external therapies. The diet should include nutritious foods such as mutton, molasses of sugarcane, sugar, butter, milk, yogurt, alcoholic drinks.

Second, the behavior: Behavior should include an adequate and sound sleep, relaxation, and leisure, and being in a happy frame of mind.

Third, the medication: Medications consist in tonics (*or medicinal butters specific for the particular humoral imbalances*).

Fourth, the external therapies: External therapies consist in the appropriate enema, taking bath in hot springs and massage.

The Benefit:

Anabolic treatment increases vitality and strength, and wards off diseases. With the strengthening of the physical constituents, the illness that afflict the body will disappear by themselves, just like a weak person that gradually regain the strength to challenge the enemy.

Excess in the Anabolic Treatment

Excess in anabolic treatment can lead to obesity, tumors with granular formation, ganglions gland lymph node disorders, lethargy, diabetes, and excess of mucus and of phlegm.

Remedies for Problem with Excess Invigorate

To remedy these consequences, and, in particular, to reduce the level of fats and phlegm, administer medications with rough property and a diet including foods of the same property. In particular, taking one of the following ingredients dissolved in a cup of water eliminates all problems due excessive weight: commiphora mukul, pith-rock, extract of chirata , honey.

Efficacious to lose weight are also the following two decoctions or infusions: of the three myrobalans with honey; or decoction of ginger, actual saltpeter, embelia, embolic phyllanthus, barley flour, and honey together. In general, it is healthier to be thin rather than to exceed in weight, for this reason the anabolic therapy should be applied to the right extent.

Methods to Reduce Weight through Fasting*The Object of Reducing Weight*

Patients requiring catabolic therapy are those who do not assimilate food properly, who consume an excessive quantity of oily and very nutritious foods, who suffer from stiffness of the limbs and other parts of the body (*cause either by wind imbalance or nerves malfunction*), and who have contagious diseases, diabetes and tumors with granular formation. In addition, there also include patients who have podagra, arthritis or spleen disorders, who have throat, brain and heart diseases, who have diarrhea or vomit caused by fever, who feel heavy and sleepy, or who lack appetite. Such patients also include those who are constipated or retain urine, who are obese, who suffer from lymphatic disorders or from disorders caused by excessive phlegm and bile,

who have great physical strength, and who are young and too virile. The beset period to follow this therapy is during the winter season.

Methods of the Treatment

The catabolic method of fasting comprises pacifying and cleansing procedures. The pacifying method (*consists in the standard four lines of treatment: diet, behavior, medicines and external therapies*) is used for re-balancing the three humors. First, to reduce an excess of energy in the body; fasting should be undertaken for a sustainable amount of time; thereafter, the person that is somewhat weak should restart to eat, taking light and easily digested foods. Second, the person with middle strength should additionally take medicines in the form of powder etc., to increase digestive warmth. Third, those who are vigorous should undertake physical exercise and other way to induce a lot of perspiration. This type of person require, in addition, external therapies such as moxibustion, compresses, medicinal bath, or blood letting, depending on the disorders they are suffering from.

The cleansing method has the function to expel the illness from the body. When illness are located in the stomach or in the upper part of the small intestine emetics are recommended. *Niruha* is recommended when the illness is located in the lower part of the small intestine or in the colon. If the disease effects the solid or hollow organs, purgatives are recommended; when it is spread throughout the channels medicines called "channel cleansers, " (*whose function unblocks the obstructions to the regeneration of the seven bodily constituents*) are recommended.

The Benefits:

The benefits include the following: the catabolic therapy makes the sense faculties clear and sharp, induces a sensation of physical lightness, stimulates the appetite, infuses the patient with energy and industriousness, regulates the sensations of hunger and thirst, ease bowel movement, urination and the winds of the upper and lower parts of the body.

Excess in the Catabolic Treatment

If the catabolic cure is taken to an extreme, it can cause thirst and loss of appetite; gastrocnemius, thighs, lumbar region and ribs, heart and head will ache, and the patient will become subject to colds and flu, nausea and to wind disorders.

Remedies for Problems due to Fasting

To counteract the depletion caused by the excess of catabolic therapy, you should invigorate the body in the way mentioned above; there is nothing better to get stronger and to build up your body than eating good quality meat, particular that of beasts of prey, with mild enema and with abundant meals followed by sleep, the body is invigorated and increases in weight.

Summary of the Two Methods

In summary, the treatments that reduce weight and excessive energy are not indicated for emaciated and weak patients. If such patients need to undergo a cleansing in order to cure a particular illness, a mild cleansing method should be administered. Fasting is useful in the illnesses accompanied by a wind deficit and an excess of one of the other two humors, while the invigorating treatment is indicated in illnesses accompanied by an excess of wind and a deficiency of one of the other humors. The healthy function of the three humors depends on the seven bodily constituents and three impurities that are their bases or pathways. Thus, in general, the catabolic cure for an excess of a particular humor would also be effective for an excess of any of the correspondent bodily constituents. Similarly, the anabolic cure for a deficit of a certain humor would also work for a deficiency of the correspondent bodily constituents. Likewise, the anabolic cure for a deficit of a certain humor would also work for a deficiency of the correspondent bodily constituents. There is, however, an exception that concerns the bones and the wind humor: fasting is applied when there is a deficit of the wind humor accompanied by an excess of bones, and the invigorating treatment for an excess of wind and insufficient growth of bones.

Chapter XVI

Principles of the Pharmacology

The most ancient manual of Tibetan pharmacopoeia is a Bon manual called *Menbum Karpo*. It is from the recipes contained in this manual that developed the pharmacopoeia described in *The Instructional* and *Conclusive Treatises*. Through the centuries, old and new manuals of pharmacopoeia gained wide circulation. The most famous and used recipe-books of Tibetan medicine include: *The Chewa Ringsel* written in the 15th century by Zurkhar Nyamnyi Dörjé, *The Drigung Chedu* written in the 17th century by Könchog Dropen Wangpo (Kun mchog 'gro 'phan dbang po, *The Damngag Kagyama* written in the same century by Lobsang Chödrag (*Blo bzang chos grags*), in the 18th century, *The Mendu Evam* written by Won Karma Ngeleg. The most widely known manuals between the end of the 19th century and the 20th century are the *Chimé Nördreng Mabu* written by Karma Ngedon Tenxin and; *Zintig Dzegyen* by Ogyen Thegchog (*U rgyan theg mchog*)

Nowadays, some Tibetan doctor pretend to write recipe-books for the preparation of medicines, but none of the new recipe-books is innovative or original, and often the new manuals are copies or summaries of the manuals just mentioned, and in particular of *The Chimé Nördreng Mabu* and *Zintig Dzegyen*.

According to the renowned doctor Khenpo Truru Tsenam, altogether there are about ten thousand different medicinal recipes clearly explained in these manuals. Studying carefully several dozens of the most well-known ancient manuals, we can prepare with precision and prescribe with confidence medicines for all kinds of diseases.

The rapid changes taking place in our society are drastically effecting the external environment and the human body. Climatic changes and pollution increases; because of habits and conditions of life, new viral diseases emerge, and the imbalances of the three humors originate new diseases. These circumstances suggest the importance to analyze with modern scientific methods the property and the efficacy of Tibetan medicines to adapt them to new diseases.

In general, medicine falls into two categories, pacifying and cleansing. Pacifying medicines can be prepared in five different forms, i.e. decoctions, powders, pills, creams and medicinal butters. The medicinal ash, the extract,

the medicinal alcohol and the precious gems mentioned in *The Conclusive Treatise* are included respectively in powders, decoctions, cream and pills. Herbal medicine has various types.

Categories of Medicines	Including of part
Medicinal Alcohols	Decoctions
Ash	Powders
Precious Gems	Pills
Extract	Creams
	Medicinal Butters

During the seventies in Tibet, (and at *The Institute of Traditional Medicines in Dharamsala, India, probably at about the same time*) almost all medicines came to be prepared as pills, probably to facilitate their sale. Such procedures do not accord with *The Tibetan Medical Treatises*. The preparation of medicines in different forms has specific purposes as described in *The Worlds of the Elder* as follows:

Different preparations are used in different phases of the treatment. First, describes decoctions, because these ripen, collect and separate illnesses [from the physical constituents]. Second, describes powders, because these eliminate the very core of the illness. Last, describes pills, because these expel the residue of the illness. In a different explanation, decoctions are mentioned first because working on the basis of their taste, their action is fast. Powders are mentioned in the middle, because working mainly on the base of the digestive taste, their action is slower. Pills are illustrated at the end because, working mainly on the basis of their intrinsic quality, their action is even slower. In brief, treat any kind of disease by first giving decoctions described in their respective section. If these are not effective, give powders, and if even these fail in eliminating the illness from the root, give pills.

Cleansing type of medicines are also of five types, i.e. purgatives, emetics, medicine administered through the nose, enema "*jamtsi*" and enema "*niruha*." The way to prepare these medicines (*too long to be discussed here*) is to be learned in detail from the manuals of pharmacopoeia. Here, we will, however, explain important and indispensable principles concerning collecting, treatment and storing/ conservation of medicinal plants.

1 Collecting Medicinal Plants

In Tibetan pharmacopoeia to various substances such as precious stones, minerals, plants, fruits and animal products are attributed curative properties; thus, all these ingredients are used in the preparation of medicines. The most commonly-used medicines are, however, made of plants and herbs that grow in Tibet. The Tibetan pharmacopoeia is the outcome of several thousand years of collecting and examining plants, and experimenting on the properties of plants by Tibetan doctors. The most ancient extant text on the material medical, *The Menbum Karpo* of the Bon medicine, (written probably around the 1800 BC.) emphasize the need to use common plants around us as follows:

Medicinal plants from far countries are difficult to acquire. Like a hero without armor and weapons, can doctors of remote areas, discarding local herbs, cure the sick only reciting medicine books? Such doctors, the poorest of all, cannot give costly medicines to the poor. Their destitute patients too can not afford the six supreme medicines imported from afar. But, if the doctor gives local herbs to the patients, apprehension of the cost of rare remedies vanishes, with the intention of helping poor patients and to help doctors of isolated place, we shall explain herbs one can use as medicines. Like water on fire, heal diseases as soon as they meet them. Freshly-picked herbs have an undamaged potency, they lose it when they become old. As a treasury of precious gems, local herbs that grow everywhere are more potent than those coming from far. In collecting and conserving them, keep in mind seven points: place, collecting, detoxifying, drying and selecting the quality and preparing them.

Similarly, to overcome the illness of inhabitants of lost lands with a benevolent mind, we shall explain how to prepare plants. *The Conclusive Treatise* states the following:

Herbs are more potent than resins;
they even excel camphor's quality.
There is no a place where you cannot
find them, but keep in mind the seven points.

The Seven points is about the proper collection of herbs. What follows here is a summary of the seven principles of herbal collection and preparation expounded in this text:

Ideal Place

The ideal place for medicinal plants is an unpolluted and pleasant environment; a natural mountain area, known as a place endowed with special energy. From a geomantic perspective, such a place has the following auspicious characteristics: it is rich in deposits of minerals and gems, and the soil is fertile. For example, the ideal location for cold natured herbs is the snowy mountains or in northern nomadic areas; the ideal place for hot natured herbs is the warm valleys of the south. Cold property plants that grow in shadowy northern regions are infused of lunar energy by the touch of the moonlight; hot property herbs that grow in warm southern valleys which are sunlit and infused with a solar energy by the touch of the sunrays.

The Conclusive Treatise refers to the ideal place for medicinal plants as "...places where the Buddha set his foot on." This statement has certainly been inserted in that treatise by personal initiative of doctors of Buddhist faith. But, if we were to believe that, the medicinal plants that grow in Tibet would never be ideal ones since the Buddha never set his foot in Tibet. The meaning of the sentence becomes comprehensible if we read the *Menbum Karpo* which on this point says: "Plants with cold, hot and balanced nature, and plants of places touched by the foot of realized beings."

Similarly, Zurkharwa in *The Words of the Elder* states that "The medicinal plants that grow in natural sacred places are the best." In Tibet, the sacred places are those in which Yogins and Yoginis have lived and practiced. These are for the most part pleasing and stimulating places where nature is good, fertile and filled with many herbs and plants. In brief, plants that grow in places that are contaminated cannot be used for medicinal purposes. For example, plants that grow in areas where garbage is dumped, or in cemeteries, or next to roads are not suitable. In particular, it is important to avoid plants growing near industries or where the atmosphere is polluted.

The Period of Picking

The roots, the branches and the stalks belong to class of the stalk and are collected in autumn (*October-November*) when the plants have become dry. These parts of the plants are a remedy for disorders of the bones, of the blood vessels, and of the nerves and of the muscular tissue.

Leaves, milk and shoots belong to the class of the leave and are collected in mid-summer (*June-July*) when plants are in their full growth. These parts of the plant are a remedy for the disorders of the six hollow organs, of the bone marrow, and of cartilage.

Flowers, fruits and tips belong to the class of fruits, and are collected in the autumn (*August-September*) when plants begin to become yellow and fruits ripen. These parts of the plant remedy the disorders of the sense organs, five solid organs and headaches.

The bark, the intermediate bark and the resin belong to the class of barks and are collected in spring (*March- April*) when plants start to grow. These parts of the plant are a remedy for disorders of the skin, of ligaments and of the limbs.

Purgatives are prepared from plants that are collected toward the end of autumn, when plants are completely dried and their potency (*predominant in earth and water elements*) has gathered inside. Emetics are prepared from plants that are picked in late spring when the plants are growing, and their potency (*predominant in fire and wind elements*) increases. *The Conclusive Treatise* states the following:

...that the period which is most appropriate for collecting the herbs is the auspicious day of the "nectar combination," when the element of water is associated to both the day (or planet) and to the constellation of the day and, also in other auspicious days of the waxing moon. boys and virgin girls should collect the plants, after having taken a purifying bath, dressed in new clothes and wearing nice ornaments. While collecting the plants they should recite sacred formulae such as that dealing with the doctrine of interdependence.

Detoxifying the Plants

To have good quality ingredients, the correct procedure is to first detoxify the plants by removing those parts that have no medicinal value or are slightly unfit for the body. The roots should be cleaned from their peel. The stalk should be cleaned from its central nucleus of soft pulp. The branches should be cleaned from their knots. There are, however, exceptions such as the *rubia coldifolia* (*btsod*) whose knots are used in medicine. The leaves are cleaned from the stem. The toxic and unfit part of the flowers lies in their peal-like back part. Stones are the toxic parts of fruits. There are, however, cases in which the stone is used. The toxic part of the bark consists in its blackish

outer incrustation formed by the exposure to the sun, water, etc. The toxic part of the intermediate bark is the flesh of the plants that adhere to it.

The Conclusive Treatise states the following:

...that milk, marrow and resin of plants are not toxic.

This means that, unlike other parts of the plant, these do not have an evident toxic aspect to be removed, but they certainly contain some toxic substances to be removed through a more sophisticated process.

The toxic components we are referring to here is not a deadly poison (that some plants do have), but diminishes the potency of the medicine. By removing such toxicity, one obtains a smooth medicine, easily assimilated and acting swiftly.

Drying the Plants

After having collected the plants, it is necessary to dry them in the proper way. First, herbs should be washed (*in the place where they have been picked preferably*), and then beaten slightly, but not to the point they lose their juice. Plants of cold property are dried in a wind-blown shady place, and never in the sun or next to sources of heat. Plants of a hot property are dried in the sunlight or next to a source of heat, and should not be exposed to cold wind. Both hot and cold property plants are not to be placed in contact with smoke or with the odor of other medicinal ingredients. Dried in the proper way, plants maintain their potency, and their curative properties are enacted.

Duration of the Curative Properties of Plants

Once collected, flowers and other green plants maintain their potency for about a year, after which they lose their curative property. Thus, medicinal plants older than a year should not be used in medicines.

Eliminating Side Effects

To minimize possible side effects of a plant, three procedures are to be followed.

The first procedure consists in mixing the medicine with several other ingredients that have the same property.

The second procedure consists in the addition of other substances that remedy to the possible side effects of an ingredient: for instance, pomegranate remedy to digestive problems, nutmeg remedy to heart problems, bamboo pith remedy to lung ailments and so forth.

The third procedure consists in the addition of substances that are an antidote to general property of herbs. All green medicinal plants (*with the exception of woods etc*) have a rough property that can cause wind imbalance, diminish digestive warmth, and deplete the physical constituents. To counteract the possible increase of the wind humor, take seasoned meat and molasses of sugarcane. To increase digestive warmth, add the ingredients pomegranate, long pepper, etc. To restore the physical constituents, add to the ingredients, the chebulic myrobalan. In all herbal preparations, such ingredients should be present. If you do not have such ingredients, prepare the plants in the form of a sticky extract. Boiling them for a long time has the effect of eliminating the side effects of the uncontrolled potency of herbs.

Compounding the Medicinal Plants

In mixing the herbs to prepare a medicine, assemble ingredients according to three procedures: assembling herbs whose property lies in the taste; assembling herbs whose property lies in their intrinsic quality; or assemble herbs whose property lies in the digestive taste, as mentioned in the previous chapter.

Plants of hot and cold nature are not to be compounded together if the medicine is intended for the cure of a single humoral imbalance, but rather with plants of the same quality. Preparation of medicines, requires the consulting of the tables (*see the recipes table*) to evaluate precisely the level of the potency of the medicine.

In the preparation of medicines, there are a few important recommendations are to be heeded. Concerning this point, Deumar's *Crystal Necklace* states the following:

Collecting herbs is not all. Consider which parts of the plants are good for what. Know that roots cure bone disorders; branches cure disorders of blood vessels and nerves; the stalk cures disease manifesting in the muscles; leaves are a remedy for hollow organs diseases, milk for marrow illnesses; shoots heals cartilage; flowers cure eye problems; fruits remedy diseases of the solid organs; tips of plants are good for head ailments; bark cures skin diseases, the intermediate bark cures the small intestine illnesses and; resins remedy limb disorders.

To prepare medicines on the basis of the principle of the connection between parts of the plant and parts of the body is of definite importance.

From the writing of earlier doctor, on the basis of trustworthy and extraordinary tables prepared on the basis of clear instruction, one can determine which is the proper time to collect the different parts of plants, and which parts are indicated for which disorders (*of the outer or inner parts of the body*) and to understand the reason for this. The tables relate the following: the seasons, the differing energies of the four elements in the seasons, roots, stalks and leaves, etc., produced by these elements, the different tastes, digestive tastes and intrinsic property (*of plants*), their seventeen qualities and the three humors of the human body also made by the four elements, the humoral imbalances (such as excess, deficit, disturbance), the twenty characteristics of the humors, the humoral class of disorders, the principal class of disorders, disorders classified according to location and type.

Though one may have gained such knowledge, methods for collecting herbs are stated in *A Drop of Pure Essence*, *An Exhortation to Commit Oneself* written by Zurkarwa Nyamnyi Dörjé and *The Oral of Instructions* by Jé Dagpo Rinchen Dawa Gyaltsen which states the following:

Having learned the art of healing, be of service to others by applying knowledge in practice.

The master Nagarjuna said: "When you know the essential instructions on the preparation of plants, shrubs and minerals of the mountains you possess the nectar that can revive the dead. Thus, collect plants with diligence."

Collecting without missing a day, the plants during summer, it is very meaningful: you can preserve your life, and with an altruistic mind relieve others from suffering.

You will become rich and honored; be offered gold, turquoise, tiger and leopard skins, armors, cloths and horses, meat and alcohol, butter and sweets, to the satisfaction of every need.

Plants in summer have many enemies, collect them before frost and hail destroys them.

In the whole life we are always busy and the lazy never have time, but plants sometime can last only a day: hit by frost or hail do not grow anymore.

Persevering in many ways, collect a plant at each step to make a bundle in each day.

Take interest in every herb, otherwise they will be rare even where they abound.

Using the wealth you have purchase good medicine from far-off lands. If you are parsimonious you always be empty handed and without medicines you will be a miserable doctor.

If you don't have the medicine ready in time when you need them, you will resemble a man that cannot find a stone to chase away a dog with rabies, while in the middle of a heap of stones.

If you don't value the herbs growing where you live
What can you accomplish with one or two herbs?
Though you have six super ingredients sufficient to load hundred yaks, you can't make them into medicines without herbs; if you do they won't be very effective; Similarly, without water and fire, you can't drink tea or eat meat and barley; if you eat them won't take away thirst and hunger.

The summer is like a bazaar of medicinal plants; the rain is like the good fortune of the doctor. Frost and hail like robbers; commitment is the doctor's wealth, and the end of the summer is the doctors' vacation time.

A doctor that, not knowing the practice well, do not learn with respect from those who are inferior; remain ignorant and never became learned. Who will solve his doubts? The one that though renowned as an expert doctor in doubt so not ask because of shame is deceived by the demon of pride.

Do not feel shame at asking and learning; Even Manjusri, the god of wisdom, had to study, and no learned or wise did not have to study.

It is the one who pretend to know without having studied to feel shame, and the one that when questioned by the wise answer in a vague manner or stands up and leaves.

The one who has no faith and shuns the wise in the midst of fools speaks like an erudite; this is really shameful, but few know it.

Also inferior people know something; learn also from them. Knowledge is gained little by little as a great ocean is made by tiny drops, a teacher with complete knowledge is rare; be content at being like a mendicant that collects alms everywhere.

A medical practice that lacks principles is the patient's demon; a teacher without qualities but arrogant is the enemy of the teaching. Thus, Nagarjuna said: "the doctor is scared of preparing medicines; the patients fear as the illness aggravates; the family is apprehensive when the illness is cured only half. The apprehension of the doctor comes from his inexperience. "Cherish these words, learn from all, lowly and high, and you will be a sage; maintaining perseverance you will become rich; getting along with all you become a leader; free from greed and lethargy, you will be very requested, and by examining the principle exposed in *The Medical Treatises* you will become a doctor really able to help others.

In order to have my students persevere in medicine, I Dagpo, the last among doctors, gave this advice in the small and cold clinic of Akxha.

I have quoted here this passage to remind young doctors of the principles to be taken to heart during study and practice. It is important to fully interpret and absorb the spirit of practice that animates Tibetan Medicine.

2 Substitutive Ingredients in Each Others

Doctors in northern nomadic areas used herbs and flowers as substitutes for woods and resins that come from the southern warm valleys and that are difficult to obtain. Using substitutes one can prepare medicines that have the same power as the original ones. This procedure has been followed in the past and still does in our days. It is validated by *The Medical Treatises on Medicine*, which give lists of ingredients that have the same property and

can be used interchangeably. Some people believe that medicines that use herbs as substitutes of the six superior remedies (*nutmeg, etc.*) do not have the same properties as the original ones. This belief is baseless because *The Conclusive Treatise* states that herbs are more powerful than resins, and they can even excel camphor.

In particular, herbs that on high mountains and among the cold rocks of the north express the best cold potency since they grow in their ideal environment. How can the quality of the six superior remedies surpass that of these plants? Similarly, the five roots which are like the king of all hot medicines belong to the herb class and not to that of woods or resins. The particularity of resins such as nutmeg, bamboo-pith and of eaglewood and sandalwood lays in the longer duration of their therapeutic properties in comparison to that of herbs. Herbs have a sharper potency and acts swiftly action potency, but retain their property only for about a year, after they lose their property and should not be used. In the form of powders, herbs maintain their property for few more months. In the form of pills, could be maintain their property for a few years. The way in which the medicines are stored also makes a difference: kept in well-sealed containers of glass, for example, they can maintain their potency for longer time. On the contrary, woods and resins as well as medicines based on such ingredients maintain their property for long time, also for several half-scores of years. The medicines maintain at longest their potency are the precious pills such as the "great blackpill" and other medicines that contain precious gems, and the "ash of purified mercury" (*btso thal*) that can remain efficacious from ten to hundred years depending on the percentage of precious gems they contain. Thus, the ingredients it contains can infer the duration of a certain medicine.

The use of substitute can be a real necessity for doctors living in remote areas, such as nomadic areas of Tibet. In using substitute ingredients you should heed precise indications. For instance, Himalayan cumin can be used as a substitute for nutmeg in medicines for wind and heart illnesses, but not in all medicines where nutmeg figures as one of the ingredients. The same applies to all substitutes. The following are some examples of substitute ingredients taken from *The Essence of the Manuals on Substitutive Ingredients*:

1. For musk use the *Caryopteris trichosphaera*;
2. for black bear bile use the *Veronica ciliate*;
3. for bezoar use yellow rock-pith or *pedicularis longiflora* Rudolph yar;
4. for white sandalwood use the *primula sikkimensis* hook;

5. for red sandalwood use caragana;
6. for camphor use corydalis conspera
7. for chebulic myrobalan use tamarisk (*myricaria garmanica*);
8. for nutmeg use cumin of the fields;
9. for cardamom use thlaspi arvense,
10. for cubeb use solomon seal's flower;
11. for bamboo pith use calciosinter or the bamboo-pith flowers;
12. for saffron use dracocephalum;
13. for cloves use the flower of the sinolimprichtia.

There mentioned 90 substitute ingredients for each other, if you would like to have more information to see *The Essence of the Manuals on Substitutive Ingredients* by Deumar Tenzin Phuntsog.

3 Properties of Ingredients Used Singularly

The medicines that can be used without the doctor's prescriptions, and are thus easy to use are those based on a single ingredient. Not all medicinal ingredients need to be mixed with others; some plants are very effective even if taken singularly. The following examples can be used daily, and, in particular for specific disorders.

1) **Chebulic myrobalan can be taken** as a decoction for multiple diseases, whether of hot or cold nature. It eliminates the toxins, and equilibrates the energies of the body. Added to other medicines for specific disorders, it alleviates the toxic quality caused by the disease and improves the effect of medicines.

2) Broths of bones, decoction of aged molasses and of garlic are the best remedies for all disorders caused by wind alone and for those in which the humor of wind is in excess.

3) Chiretta and seeds of balsam apple are the best remedies for bile disorders. In particular, decoction of chiretta is indicated when the problem is caused by bile alone or in disorders where the bile humoral is in excess. The decoction of balsam apple (*herpetospermum penduculosum*) eliminates quickly fevers caused by bile disorders.

4) Black pepper and honey are the best remedies for phlegm disorders. Grounded and added to foods, black pepper remedies alleviate cold

disturbances of phlegm and increases the digestive heat. Honey, added to foods, or with boiled water, reduces weight and increases digestive heat.

5) *Corydalis impatiens* and *laetis yunnanensis* are the best remedies for blood disorders. Taken as decoctions they purify the blood, and assist in curing chronic blood disorders.

6) Calcite is the best remedy for stomach inflammations and other "dark phlegm" disorders. Purify the calcite by boiling it or putting in the hot embers, then crush and work it flat on a mortar by adding milk of *dzomo* until it becomes a very fine powder

7) Violet halite is the best remedy for bad digestion. Added to foods, it makes them more easily digested and facilitates digestion.

8) Slaked lime potion is the best remedy for internal and external cysts of the flesh; smeared on the body it dries the cysts. 9) *Androsace maxiae* is the best remedy for dropsy /ascites. The decoction of this plant (picked in the right time) expels retention of liquids and dries excessive serum.

10) *Rhododendron primulaeflorum* flowers and iron flour decoction is the best remedy for anemia.

11) Decoction of *Astragalus floridus* and the extract of reddish cow urine are the best remedies for edema.

12) Meat, alcohol and milk are the best supporting foods for consumptive diseases, they replenish the body, giving vitality and strength.

13) Decoction of Horned cumin and of *Geranium pylzowianum* is the best remedy for infectious and contagious diseases.

14) Decoction of white sandalwood and *Laetis yunnanensis* is the best remedy for fever caused by sudden physical imbalances. 15) Bezoar taken with fresh water is the best remedy for all kinds of fevers.

16) Decoction of chebulic myrobalan and the extract of white or red turnip grown in high mountains is the best remedy for poisoning and intoxication from manufactured poisons, food intoxication, and intoxication caused by medicines.

17) Decoction of *Torularia humilis* is the best remedy for toxicity caused by bad meat.

18) *Commiphora mukul* and musk are the best remedies for infections. Decoction of *commiphora mukul* is indicated in all infectious disease caused by various organisms. Musk, taken with water, cures infections and kills organisms.

19) Barberry and the three myrobalans are the best remedies for the eyes. The eye salve of extract of barberry diluted in water cures many eye illnesses. Depending on the type of eye problem use the decoction of one of the three myrobalans. Decoction of chebulic myrobalan is indicated when the eye problem is caused by toxins; that of beleric myrobalan is indicated when the eye problems are caused by malfunction of bile, and that of embelic myrobalan the eye problem is caused by blood disorders.

20) Gargle or mouth wash with sweet ingredients such as sugar, molasses of sugarcane are the best remedy for mouth problems that are not of microbial origin.

21) Nutmeg is the best remedy for heart-related nervous conditions. Take nutmeg powder with a little melted butter or in good quality ale for sadness and depressive syndrome. However, nutmeg is harmful for persons that suffer from high blood pressure or have high rate metabolism.

22) Bamboo-pith dissolved in water is the best remedy for lung illnesses.

23) Saffron and rock-pith are the best remedies for liver disorders in general, and hepatitis, in particular. Soak saffron pistils in water and take rock-pith as decoction.

24) Cubeb and other warm ingredients are the best remedies for spleen-related disorders. Decoction of cubeb is indicated in digestive problems and allergies caused by spleen malfunction. In these cases, the decoction of medicines with a warm nature such as ginger, long pepper, black pepper, taken regularly are also indicated. These ingredients increase digestive heat, and rebalance the function of the digestive bile.

25) Cardamom taken as decoction is the best remedy for the kidneys: it gives warm and re-activate kidney function.

26) Pomegranate is the best remedy for stomach problems. Taken on a regular basis as a decoction, pomegranate is indicated in cases of weakening of digestive function, which is the cause of stomach problems. It increases digestive heat and heals stomach problems.

27) Embelic myrobalan, curcuma and barberry decoctions are the best remedies for diabetes because they remove sugar from the blood and liver.

28) Ammoniac salt and vemiculitum are the best remedy for

anuria (block of the urine) and reactivate diuretic functions ammoniac salt should be taken in very small doses; vemiculitum powder dissolved in water.

29) Toasted rice is the best remedy against vomit.

30) *Cynanchum vincicetoxicum* is the best remedy against diarrhea.

31) *Thalictrum aquilegifolium* and *rubus niveus* are the best remedy for problems of the respiratory ways. Taken as tea they cure bronchial and nasal mucus.

32) The juice of *Lacciferlacca* and the decoction of Pea flowers are the best remedies for tuberculosis accompanied by expectoration mucus with blood.

33) The water from burned clay is the best remedy for thirst accompanied diseases.

34) Decoction of *enula racemosa* root is the best remedies for sharp pain (*particularly sharp infra ribs pain*).

35) Buttermilk is the best remedy for hemorrhoids.

36) Decoction of *embelia laeata* is the best remedy for sinusitis.

37) Decoction of roots or berry of *Anisodus tanguticus* are the best remedies for appendicitis.

38) *Ligusticum pteridophyllum* are the best remedies for tumors with granular formation.

39) Decoction of moonseed is the best remedy for gout.

40) Blood of a young and non-castrated mule is the best remedy for arthritis.

41) Mercury whose toxic components have been removed in process involving the use of sulfur is the best remedy for lymph or serum fluid disorders.

42) Extract of *Rhamnella gilgitica* taken on regular basis and for long time, is the best remedy for leprosy.

43) Clarified old butter is the best remedy for all forms of mental derangement.

44) Fresh water sprinkled on the chest is the best immediate remedy for fainting.

45) Boiled milk, taken hot, is the best remedy for insomnia.

46) Fish soup is the best remedy for hoarseness caused by clotted mucus.

47) Yellow ochre dissolved in water is the best remedy for burnings.

48) Hematite is the best remedy for fractured bones.

49) Application of Cinnabar's powder is the best remedy for suppurating sores and wounds of skin and flesh.

50) Decoction of seeds of notopterygium for besii is the best remedy to stop hemorrhage.

51) Black Bear's bile is the best remedy for cicatrization, (*forming of scar tissue*), for re-growth of skin.

With the exception of anisodus tanguticus and some others, these ingredients can be taken as decoction or tea for often.

4 Best remedy

Let us see what are some of the principal therapies indicated for the different diseases.

The Best Medicines

In Tibetan Medicine dozens of recipes can be used to cure a single disease. Among them there are certain ones which are considered most efficacious or best. Here, we will mention some of them, which are useful to remember in case of certain diseases.

1) Camphor-3 (known in Tibetan as *Gabur gyelon sumpa* or *Lonpo sumgior*) is the best remedy for severe fevers,

2) Alleciating compound-5 (*Dewa Nggior*) is the best medicines for infectious and contagious diseases.

3) Camphor-7 (*Gabur Dunpa*) is the best medicine for fevers aggravated negligence.

4) Camphor-25 (*Gabur Nyernga*) is the best medicine for chronic fevers.

5) Principal-8 (*Tsowo Ghiejor*) is the best medicine for all kinds of fevers.

6) Alleviating bamboo-pith (*Ciugang Degie*) is the best medicines for diseases of a combined hot and cold nature.

7) Decoction of elecampane-4 (*manu shitang*) is the best medicine for diseases in which fever is accompanied by a wind imbalance.

8) Decoction of myrobalan-3 (*drebu sumtang*) is the best medicine to purify blood.

9) The precious pill called "Great compound" (*mangior*

chenmo) is the best medicine for intoxication.

10) Pomegranate-4 (*sedru shipa*) is the best medicine for stimulating the appetite.

11) *Gomakhche* is the best medicine to increase digestive warmth.

12) Pomegranate-8 (*sedru ghiepa*) is the best medicine for diseases of a cold nature (*all chronic diseases*).

13) *Trulkyi telmen* is the best medicine for tumors.

14) Antidote-7 (*nyenpo dungior*) is the best medicine for stomach inflammation and other diseases of dark phlegm.

15) Black aconite medicinal butter (*tsendug menmar*) is the best medicine for depressive syndrome.

16) Great salt compound (*tsagior chenmo*) is the best medicine for anuria (lock of the urine).

17) Illuminator-9 (*selgie gupa*) is the best medicine for eye problems.

18) Garuda-5 (*khyung nga*) is the best medicine for infectious microbial diseases.

The Best External Therapies

Blood letting is the best therapy for blood disorders.

Bath in cool waters and purgatives are the best therapies for bile disorders.

Emetics and moxibustion are the best therapies for phlegm disorders. Massage and enema are among the best therapies for wind disorders.

The Best Diet

For all kinds of diseases the best food is the tasted aged barley flour (*tsampa*) and the best drink is the infusion of tea flowers.

Best Behavior

The best behavior consists in doing the right amount of physical exercise and activity, but not such as to cause perspiration. In the ancient Tibetan society exercise was usually associated with religious practices such as circumambulation of sacred places, prostration, and various forms of yoga.

5 Minor Medicinal Compounds

Black Aconite Medicinal Butter

On the preparation of this medicine, *The Words of the Elder* states that "inexperience in the preparation of this medicine can be deadly." Therefore, one should head the following practical instruction on the correct procedure of preparing it:

Take a measure of black aconite root, ground it roughly and then soak it into an alcoholic drink [whiskey or other] sufficient to cover the root, for 24 hours. The next day, work the root with a pestle on a flat mortar until the paste become sufficiently thick to be made into pills. Then grind into powder eight measures of chebulic myrobalan, and add it to the aconite paste. Work both again with the mortar till the paste become thick. During the summer, this step of the preparation require half day of work, in colder seasons a few hours more. When the paste has taken the color of good quality ink, add two measures of water, and boil down the compound to half of its size. Then, add milk (of *dzomo*) in half of the quantity of the paste and an equal quantity of butter (of *dri*) Boil until the liquid has totally evaporated, paying attention not to burn the paste. Put the paste in a contained and let it cool. Once the paste is cooled down, add the six superior ingredients (*nutmeg, cardamom, cubeb, bamboo pith, saffron, cloves*) and sugarcane molasses. Take this medicinal butter in the early morning at daybreak. The initial dose should be big as a chebulic myrobalan. If, as a result of ingesting the medicine, the patient experiences a tingling sensation, numbness of the skin, or becomes stunned, reduce the dose, and discontinue taking it for a few days.

Tonic Medicinal Butter

The tonic medicinal should be prepared in an auspicious day of autumn or winter. Ingredients should be well cleaned, their toxic parts removed, and treated in a way to potentiate them. The preparation should be done under hygienic conditions. Let us see the essential procedure for the preparation of the tonic medicinal butter according the instructions of Gothat Phuntsog Rabten () (*from Dergé, Tibet*).

Preparation of Honey

Honey can be of two qualities clear or dark. The clear honey is the most indicated here. Take the honey as it comes from the beehive, and put it in an iron pan. Add to it an equal measure of water and boil it slowly for some minutes. Then, filter the honey with a cotton cloth. Pour the filtered honey back into the pan, and boil it on a very low fire. Honey will thicken, and foam will appear on the surface. Take the foam away with a wet radish or a small piece of paper. Make sure you boil the honey on a very low fire, and you stir it continuously so that it does not burn. Honey will thicken. Boil it until all water has evaporated. Check the right consistency of honey by lifting up a little honey with a wooden spoon. If the flowing thread which forms breaks when pulled, the honey has acquired the right consistency. Take the honey away from the fire, and let it cool for a few minutes. Now, the honey has to be pulled with both hands by a strong person. When pulled in this way, the honey becomes harder, and eventually easy to crumble. It assumes a light and shining color. At this point, the preparation is complete. It should be ground into powder, and stored in a cold place.

Preparation of Sugarcane Molasses

The molasses used in the tonic is the clear one as opposite to the dark type, though, in general, there is no difference between the two types. Ground the molasses, and add to it an equal measure of water. Pour it into an iron pan, and boil it over a very low fire. Once the molasses has melted, boil it for a few minutes. Then, filter it with a cotton cloth. Put it back into the pan, and boil it over a low fire, stirring continuously until the water has evaporated. Once the water has evaporated, at this point be particularly careful not to burn it on the sides of the pan. Pour the molasses in a cup, and let it cool. Store it at a very low temperature. If it becomes very hard like stone, it is a sign that has been prepared properly. Grind it till it becomes powder.

Extracting the Essence of Herbs

If you want to prepare (*half a kilogram, for instance*) of the basam tonic medicinal butter (*that has rejuvenation and regenerative functions*) take the following ingredients:

Ingredients	Measure	Tibetan
Chebolic Myrobalan	25gr.	Arura
Beleric Myrobalan	25gr.	Barura
Embelic Myrobalan	25gr.	Jurura
Angelica	50gr.	Jiawa
Polygonatum	50gr.	Ranye
Asparagus	50gr.	Nyeshing
Himalayan Mirabilis	50gr.	Batrul
Tribulus Terrestris	50gr	Zema

To these you can add other ingredients as follows (*that, however, are not indispensable*) for this tonic:

Ingredients	Measure	Tibetan
Calcite	50gr.	Chongzhi
Rock-Pith	50gr.	Drugshun
Sabina's Berry	50gr.	Shugdrum
Leaves of Rhododendron Primulaeflorum	5gr.	Balu
Ephedra	5gr.	Tser
Thite Artemisia	5gr.	Khenkar
Peach Flowers	5gr.	Khambumethok

In addition to the above ingredients, add 5 gram of other good quality and non toxic flowers.

Ground roughly these ingredients, and add two liters of water. Boil the ingredients until only one liter and a half of water remains. At this point, filter the juice with a cotton cloth, throw away the leftovers of the ingredients, and then add two liters *dri* milk. Boil the decoction, stirring continuously until the juice of the ingredients is, so to speak, absorbed in the milk. When all the water has evaporated, and only two liters of milk is left, add an equal quantity of butter. Boil the liquid, increasing gradually the strength of the fire. To prevent the liquid from burning, take a piece of fat meat with a fork, and with it oil the bottom of the pan. This is important because otherwise burnt substances will get lost in the medicine, and if ingested, may cause problem in the digestive tract. Boiled in this way, milk get absorbed in the butter, and

the residue separates from the good part. Check if the procedure is complete by pouring a few drops of the liquid, which at this point should resemble melted butter, on the fire. If it does not produce the sound "*tsak tsak*," and when the residual part at the bottom of the pan assumes a certain consistency, the medicinal butter is ready. The good part of the butter should have a taste half way between bitter and sweet.

Adding Other Ingredients

Take the medicinal butter, and let it cool in a clean container. When it assumes the consistency of yogurt, stir it with a wooden spoon. It will become white like a canticle. At this point, add the powder of the addition ingredients for specific disorders as the case requires, and then stir the butter again. Then, add an equal quantity of molasses (*prepared before*), an equal quantity of honey, and boil slightly the medicinal butter. Finally, add grounded to powder sugar in crystals. Mix everything properly, and make the paste into pills. The dimension of the pills should be that of a peach stone. While you do this preparation, avoid people going back and forth in the laboratory.

The efficacy of the medicinal butter depends on the correct method of its preparation. Therefore, it is important to detoxify some of its ingredients so that their potency is increased. For instance:

1) The stone of the three myrobalans should be removed, and only the pulp is to be utilized. Even a small amount of stones will harm the body, and cause retention of liquids.

2) The polygonatum should be dried in the sun, and then cooked in milk of *dri* or sheep. Thereafter, it is dried again. In this way, its potency increases.

3) The Himalayan mirabilis is of two types: major and minor ones. In the medicinal butter the minor one is used.

4) Tribulus terrestris are slightly toasted in an iron pan before using them, until its tips are burned. Tribulus terrestris is, however, not indicated for the medicinal butter, specifically intended for long life, in which case it should be substituted by gymnadenia root. However, one should not exceed the quantity of this last ingredient because of its sticky quality. Before using it, gymnadenia should be dried in the sun, and boiled in goat milk.

5) Asparagus should be cleaned from its outer peel.

6) Calcite of the best quality has a very white color. To remove its toxic elements, break the calcite into pieces, and then boil it in water for about twenty minutes. Remove the foam and other impurities. After wash the calcite

for eight or nine times with cold water. Then, powder the calcite on a flat stone mortar, adding to it milk of *dzomo*.

7) Rock-pith should be cleaned from small stones, animal feces and other impurities by boiling into a juice or even better an extract. In general, all the ingredients used in the medicinal butter should be of a good quality, i.e., not spoiled, damaged by frost or hail, dirty, smoked or chemically polluted.

Kongtrül's *Manual of Transcribed Instructions* describes the preparation of the basam tonic in the following way:

The tonic indicated for all types of persons is the basam medicinal butter. Its ingredients comprise the three myrobalans and the five roots. The quantity of the three myrobalans should match that of the five roots. However, if the tonic is made for a person susceptible to hot disorders the quantity of the three myrobalans should exceed that of the five roots. If the person is prone to cold diseases the quantity of the five roots should be exceeding that of the three myrobalans. Ground the ingredients roughly, add water and boil them in a pig-iron pan till you get their juice out and the ingredients lose their taste. Then, add more water and boil the ingredients again. Repeat this process three times, then filter the liquid and throw away the leftovers of the ingredients. If the liquid is four measures, boil it down to three measures and then to one measure. Add four measures of freshly milked milk. (*Milk of dri is very nutritious, but heavy in quality, and not indicated for people suffering from bile or blood conditions. More indicated for them is the milk of dzomo that has a balanced quality*) Once you have poured the milk, stir continuously. Add a little butter in order not to let the liquid burn, then [when the liquid is reduced to four measures] gradually add more [four measures of] fresh butter. Boil until the liquid has come to four measures. Add a handful of each of the additional ingredients. If the tonic is for bile patients use only half of the medicinal butter. Stir energetically until everything is absorbed into the butter. When you pour a few drops of the tonic on the fire, if it does not produce the sound 'tsak tsak,'

this is the sign that water is completely evaporated. Mix everything well till the tonic. Then, store the medicinal butter in a well-sealed jar. Take a thumb size or a bird egg size of the tonic every morning at dawn with hot water.

The additional ingredients specific for the various diseases must be learned from the chapter on *The Medicinal Butter of the Conclusive Treatise*. *The Conclusive Treatise* provides the general guidelines on the preparation of the medicinal butter that Tibetan doctor should follow:

The method of preparing any kind of medicinal butter is by repeated extraction of the essence through boiling. Reduce the liquid-essence to three measures, then add four measures of freshly milked milk. Boil, stirring, to absorb water into the milk. For hot disorders use butter of *dzomo*, cow and goat for cold disorders use aged butter of *dri*, or sheep. Absorb milk into the butter until all water has evaporated, then have the essence separated from residues. When it does not burn the finger upon touching it, throw in fire the tonic, which will not produce sound. This indicates that water has dried; if you continue [to boil], the tonic will burn. If some water is left, the tonic is not assimilated, and will have little side effect. Add to the well-prepared [medicinal butter] additional ingredients, the three sweet ingredients, mix them, and take a mouthful.

A particular procedure to prepare honey comes from the oral instruction of Tshedrub Dörjé, a doctor from Dergé, which is as follows:

Take a measure of honey and add to it a third of its quantity of alcohol (*whiskey or other*), and boil it. After a while, filter the honey. Add a piece of lean meat (*of yak or other*), and continue to boil until the meat takes on a blackish color, then take the meat out. From beginning to end stir the honey continuously until the water has fully evaporated. Pour a little honey on a stone and let it cool. If it becomes sufficiently consistent to be made into pills, this indicates that the water has completely cooled from the extremities to the center. At this point, collect the honey to the center of the container, then pull it energetically with the hands. Once it has become dry pull it on two sides until it breaks into pieces.

Medicated Alcohol

There are various types of medicated alcohol. One should learn their specific recipes from the chapter on *The Medicated Alcohol of the Conclusive Treatise*. Here we shall explain an easy way to prepare a medicated alcoholic brew made with the dough of the powder of several medicinal ingredients described in Kongtrül's Manual of Transcribed Instructions.

The alcoholic brew prepared with the dough of the powder of various medicinal ingredients is the most indicated for the disorders of a single humor and for a combined disorders of two or three humors. The necessary ingredients for this preparation are the following: Salomon's seal, asparagus, caltrops and mallow seeds. Take a handful of these ingredients and grind them to powder. Add two handfuls of un-toasted green barley flour. Mix the ingredients and add some water and make dough. Make flat small gnocchi. Put them in a pan and pour lukewarm water in a quantity sufficient just to cover them. Add yeast. Store the pan in a warm place for three days. When you feel the typical smell of a fermented brew add a little melted clarified butter, a handful of powder of Ginger, 25 gram of molasses and a little water. Mix the preparation that will have the consistency of Yogurt. At this point, the brew is ready to be used as medicine.

The detailed procedures and use of minor medicinal compounds should be learned from the medical manuals, which explain these compounds. Here, we have given a few examples of compounds that can be used on a daily basis in conjunction with meals and behavior.

Chapter XVII

External Therapies

Among the four lines of treatments in Tibetan medicine (*diet, behavior, medicines and external therapies*), external therapy can give rapid results in both ways, positive or negative. External therapies consist of bloodletting, moxibustion, compresses, fomentation and massage plus minor surgery that will not be discussed here.

1 Blood-letting

Blood letting is not Indicated

Blood letting is not indicated for sudden illnesses caused by provocations, in the case of anemia, and in all consumptive types of illnesses caused by wind and phlegm imbalances; during pregnancy and right after child-birth, for person with weak digestive warmth. However, it is possible and advisable to perform blood letting if the phlegm or wind disorder is associated to bile disturbance. Blood letting should not be performed in the case of inflammatory and infectious conditions, and when residual blood has not been properly separated from the pure blood through medications; in the case of not fully manifested fevers caused by infectious and contagious diseases; and in the case of empty fevers (*associated with a wind imbalance*), and for patients that are very weak. In these cases, though the disorders is of a hot nature, blood letting is not advised because it can aggravate a weak physical condition. If the cause of wind or phlegm is associated with blood or bile disorders, blood letting is a suitable treatment. Blood letting is practiced to treat those illnesses that are caused by blood and bile disorders that may be accompanied by circulatory problems and, when, for example, blood fluidity is reduced, increase of fatty components (*cholesterol*) and of blood residue. Other cases in which blood letting is indicated include: physical heaviness and particularly heaviness of the limbs, fevers concomitant with infectious and contagious diseases, fevers due to dispersion in the diseases in the body and fevers aggravated by negligence in diet and behavior. Lastly, blood letting is useful in ulcers produced by an increase of impure blood (*accompanied by pain in the upper part*

of the trunk and head); gout, skin infections, erysipelas, lymph and serum liquid disorder, leprosy, etc.

Blood-letting should be performed in three different phases of a disorder: at the onset of the illness, after sometime from its inception, and in the conclusive phase of a illness:

At the Very Onset of the Illness

At the very onset of a problem, in cases in which it is not advisable to wait until the disease is ripened, as in the case of deep wounds or internal hemorrhages that have caused a blood invasion of vital organs; in the case of uninterrupted nose bleeding, and in the case of excessive or uninterrupted menstrual blood; in the case of severe fevers, and in the case of fevers aggravated by negligence;

In the Middle Phase

After sometime from the inception of a problem when the sharp pains caused by blood or bile disorders no longer spread but are concentrated in one part of the body, and when as a indication that the impure blood has separated from the pure one, there manifests a tingling and heavy sensation in the limbs.

In the Conclusive Phase

In the conclusive phase of an illness when, for instance, impure blood has separated from the pure one, the dark red color of the extracted blood is a sign that such separation has occurred. If the color of the blood extracted is partly bright, and partly dark red, separation has not taken place, and must be effected by administering a decoction of the three myrobalans (*for a minimum of three days up to a week*). Moreover, perform blood letting in the conclusive phase of a disease when "toxic" blood has spread to all parts of the body, or when the residue of a hot illnesses has been reawakened by an improper diet.

One should choose carefully the proper time to practice blood letting. If this therapy is performed before the right time, the extraction of blood may result in an increase of the wind humor and in spreading of the fever

throughout all body. If the therapy is late, the impure or "toxic" blood spreads to all vessels and the residue of the illness remains in the body. Particularly, when the disease is accompanied by very severe fever, the toxic blood leaves mucus-like deposits in the vessels and vital organs, thus, harming bodily functions.

The Best Period for Performing

The best period for performing blood letting is the day when, from an astrological perspective, the planets and the constellations are favorable. This because the synchronicity between the elements of the nature and the elements of one's body has a definite importance. Prior to the therapy, make sure that at the moment of extraction of the blood, the "bla" or protective energy (*quintessence of body elements*) is not present there. Operating on an area of the body when the "bla" is present may yield negative consequences for one's health. Deumar Tenzin Phuntso emphasized this point by saying the following:

The "bla" is one of the three factors that determine the lifespan. On some, though "bla" is not checked, blood letting does not yield any consequence, thus, many think that is always the case. But, if the "bla" is joined by "the deity of life" blood-letting can cause death; if joined by the "deity of the body" blood-letting and moxa cause wounds and paralysis; if joined by the "air goddess" blood-letting and moxa replenish one of merit and shortens life; If joined by the goddess of birth blood letting and moxa diminish strength and radiance; thus, never practice these therapies in the days of the "bla."

How to Practice the Bloodletting

Prior to blood letting, the patient should be on full stomach and be well warmed by sunlight or other sources of heat. Avoid visitors in the place where the therapy is under way. First, tie the area of the the body immediately above the spot where incision is to be made made with a homeostatic lace, without squeezing the area. When the vein has emerged, massage it a little, then with a thumb press on the vein, and mark the point immediately below with the nail of the other thumb. Make the incision with a

bistoury. The sound "trep" indicates that the bistoury has incised the skin and the flesh. Withdraw the bistoury; continual pressure will cut also the lower part of the vein, and the flesh below it, resulting in swelling. Let the dark blood of illness come out. When the color of the blood turns bright red, release the homeostatic lace and stop bloodletting. Apply alcohol on the incision and gauze. After the therapy, the patient should rest for at least a week as intense activities can cause reappearance of toxic blood, and avoid those foods and drinks such as alcohol that may upset blood.



The Points of Veins

The Conclusive Medical Treatise describes seventy-seven veins suitable for bloodletting. However, bloodletting can be done on another seventy-five vessels that have not been mentioned in this treatise, but whose knowledge was transmitted as a secret instruction. The seventy-seven veins mentioned in *The Conclusive Treatise* are here identified on the basis of instructions of Deumar, Situ Chökyi Jungné and others. Yönten Phuntsog has taught this identification to the author.

If one wishes to know in detail about their location and therapeutic use, one should study the chapter on Blood-letting of the *Conclusive Treatise* and the manual known as *Katakar*, Instructions on Blood-letting written by Deumar

Tenzin Phuntsog. Here, we shall confine ourselves to mention certain veins that are most commonly used for this therapy.

Some points of blood-letting and their therapeutic indications are as follows:

- 1) The vessels of the anterior fontanel four finger above the line of the hair of the forehead for headache and migraine;
- 2) The nose vessels below the tip of the nose for eye problems;
- 3) The tongue vessel: the two dark veins situated below the tongue to the right and to the left for hoarseness and glottis;
 - a. The cephalic vein (*gongtsa*), the basilica vena (*gru mgo*) at the elbow depression, the medial cubital vein (*snod kaar*) at the elbow depression, or the vena basilica (*ru thung*) four fingers below the elbow depression, for severe fevers, for thickness of the fats in the blood; sharp pains in the upper part of the trunk; for acne; weakness of the sense faculties, and mental confusion;
- 4) Great saphenous vein at the ankle (*longtsa*). Lesser saphenous vein above the heel of achilles (*jinshung*). Great saphenous vein at the upper foot, beside the dorsalis pedis artery (*yobgoong*), for heaviness in the lumbar region and other lower areas of the body, difficulty of lifting and posing the legs while walking caused by toxic blood, and for weakness of the kidney functions.

2 Moxibustion

When Moxibustion is not Used

Moxibustion is not indicated for fever caused by blood or bile (i.e., hot) disorders, and should not be done on the vessels and nerves of the sense organs and on those of the male and female reproductive organs.

When Moxibustion is Used

Moxibustion is indicated for digestive problems, decrease of digestive warmth, dropsy, anaemia, cysts of the flesh, ulcer at the duodenum, stomach impurities, headache caused by cold disorders of bile, stiffness of the limbs caused by lymph disorders, tumors of granular formation, anthrax, empty fever (*wind with accompanied by fever*), mental derangement, mental disorders

accompanied by loss of memory and neurological diseases. Suitable to moxibustion is:



Points of the Body where Illness is Manifest:

Painful spots where digit pressure is efficacious, areas where a nerve or tendon distortion has taken place, areas where there is tingling or where no tactile sensation is felt as a result of nerve weakness, and all points correspondent to malfunctioning nerves (*tendons, etc*),

Points Specified in Medical Treatises

These are extensively illustrated in *The Conclusive Treatise* and in Deumar's *A White Crystal Mirror of Extensive Instruction on Moxibustion*.

There are only 71 moxa points mentioned in *The Conclusive Treatise*, however, Deumar's extensive instructions on acupuncture entitled *The White Crystal Mirror* mentions 322 points: 70 on the back, 57 on the frontal part of the body, 71 on the head, 58 on the arms, and 44 on the legs. These should be learned from that text.

Here, we shall indicate the therapeutic benefit of moxibustion on the most common points:

1). On the points at the top of the head. On the four points directly at the top of the head (on the so-called seals of the head and other three points situated each at four fingers to the back, right and left of the top of the head point). On the point between the two nipples. On the fifth and the sixth thoracic vertebrae. For dizziness caused by wind imbalance or nerve disorders,

trembling caused by paralysis, etc, loss or impoverishment of sense faculties, for sudden fainting, schizophrenia and other forms of mental derangement and sadness, lethargy and sighing.

2). On the external occipital protuberance points. For mental illnesses associated with confused language and epilepsy.

3). On the point below the lower lip: for the loss of speech caused by wind disorder. 4). On the point above the ankle, for loss of speech due to larynx problems.

5). On the points on the tendons above the wrist, for sighing accompanied by tears, delirium accompanied by tears and hallucinations caused by infectious and contagious diseases.

6). On the point above the dorsal part of the foot, for impotency and loss of semen.

Moxibustion in Tibetan medicine is done in two different ways: with cones of lion's foot and with a metal instrument called *tshug* or *tel*. In the first method, first shape a small amount of lion's foot into a piece of garlic, with a flat large base and a thin point, in size equaling half of the last phalange of the small finger. Smear the point where you want to apply the cone with an appropriate sticky substance. Light the cone and let it burn, blowing your breath on it until the burned skin produces the sound "*phak*."

With the metal instrument called *tshug*, first make the tip of the instrument red-hot by placing it in hot embers, then apply it to the point for a short moment. In general, the instrument can be made of iron, copper, gold, the horn of an animal, barberry or another type of wood. Nowadays people say that instruments made of different materials are indicated for different diseases, beginning with barberry wood, horn and then only iron and copper etc, are indicated to be used.

3 Compresses

In general, compresses are indicated for patients that suffer from disorders of a cold nature, i.e., phlegm disorders, that have digestive problems, appendicitis, lymphatic problems, circulatory problems, sharp pain caused by fever.

Compresses are not indicated for anemia, jaundice, smallpox, contagious fevers, leprosy, dropsy accompanied by fever, obesity, acne, and it should be remembered that compresses are not to be applied right after meals. Compresses are of two types, cold and hot.

Cold Compresses being Indicated in the following Cases

Fevers accompanied by sharp pain that have been caused by contusions, fevers aggravated by patient negligence, and in cases of contagious disease; in the case of infectious wounds or swellings that cause fever and pain; in the case of wounds at the eyes that cause swelling and fever. Cold compresses consist in the application of very cold water from high mountains on the head and on the upper part of the trunk (*preferably the upper back*) and points affected by an infection. Water can be spread or applied imbued in a cloth or in a water bag. Alternatively you can also use a stone extracted from cold waters, or a precious gem such as the *zi* or crystal after having left it in very cold water for sometime.

Hot Compresses being Indicated in the Following Cases

Loss of heat in the legs and arms, difficulties of digestion, appendicitis, stomach pains caused by intake of very cold foods and drinks, or from the exposition to cold wind, and so forth. In these cases that hot compress may consist in the application of a hot-bag, or in the application of well-heated salt.

In cases of pain at the sole of the feet, sudden immobility of the spine, or sciatic pain, as a compress apply a well-heated terracotta brick or a stone at the sole of the feet.

In cases of pain caused in the lumbar area caused by a loss of heat in the kidneys, as a compress wear over the kidney a fur of lynx or wolf.

These old remedies can somehow be modernized by using as compresses more practical and modern sources of heat which work as well in alleviating symptoms of nerve disorders. Moreover, hot and cold compresses can be prepared with the addition of specific medicinal ingredients: The application and therapeutic benefits of these compresses should be learned from *The Conclusive Treatise*.

4 Fermentation

Fermentation therapy yields considerable results, and is simple to use. Fermentations are indicated in cases of stiffness, contraction or paralysis of

the limbs caused by nerves disorders or weakness; tumors with granular formation; anthrax, old and new wounds or ulcers, gynecological diseases associated to wind imbalance, bending of the spine. Lymphatic disorders manifesting in the flesh and bones, and particularly in wind disorders.

Fermented drinks are not indicated in the following cases: Infectious and contagious diseases, diarrhea, severe fever, anemia, emaciation, loss of appetite.

Tibetan medicines also classifies hot, applied medicinal plasters as part of fermentation.

Medicinal Baths

Medicinal baths fall into two general categories: those indicated for hot disorders and those indicated for cold disorders. There are, however, many specific baths. A medicinal bath of the "five nectars" is good for every condition. The five nectars are as follows:

Leaves and wood of rhododendron *primulaeflorum* (*smoothen the skin*); leaves and wood of garmanica Tamarisk (purify the bone); ephedra (develops the bodily constituents), white artemisia (*balances the physical elements*); leaves and berry of juniper (*have manifold benefits*).

To prepare these ingredients for the bath, grind them roughly whenever they are still green. For example, half kilogram of each of them and 250 gram of each of the five roots. Boil these ingredients in a pot with an abundant quantity of water for one hour. To facilitate the extraction of the juice from the ingredients add 250 gram of *trona* (*soda*). After boiling the ingredients, add yeast or another fermenting agent. Leave the liquid to ferment in a sealed container and in a warm place for three days. Fill the bath tub with hot water, and pour into it a liter of the liquid. Enter the bathtub, immersing all of the body, except the head. To avoid dispersion of heat and vapor. Cover the bathtub with plastic. Remain in the bathtub for forty to fifty minutes.

Alternatively, prepare the bath in this way: put an equal quantity of each of the five nectars in a pot, and add green barley and a little *trona*. Add sufficient water to cover the ingredients, and bring to a boil. When the water is about to dry up, add a little more water, and continue boiling. Proceed in this way for two or three times. When the water is absorbed, stop the boiling,

and let it cool. When it has cooled, but is still warm, add yeast or another fermenting substance, as you do for alcoholic brews. Let the ingredients ferment for three days as before. When you can smell the fermentation, add the five roots roughly ground. If the patient has problems with nerves, add ten grams of musk; if it is a lymphatic disorder, add a little sulfur.

In this preparation the fermented medicinal ingredients are now mixed with barley ale that has been diluted with water and filtered from the fermented barley residue. Before mixing, the barley ale should be boiled a little, then let to cool. Once mixed, boil everything again. Filter the liquid, discarding the remaining ingredients. Pour a liter of the liquid into the hot tub. Enter and remain in the bathtub as explained before. Repeat the medicinal bath two or three times a day, for a period of a week. If, in the course of this therapy, the blood rises with wind to the upper back and causes pain, take the appropriate medicines such as "serthang-18" or "eaglewood-35." To strengthen the constitution of weak people during this therapy, fresh good meat and toasted barley flour soup should be included in the diet. At the end of the week of therapy, massage the body with toasted barley flour mixed with a little butter.

Medicinal Vapors

This therapy was very popular in the eastern regions of Tibet, while around Lhasa people preferred the medicinal baths. The same ingredients of the medicinal bath can be used for the vapors. The therapy requires a suitable room, somewhat like a sauna. Set a fire stove in a room where the prepared ingredients are set to boil and produce vapor. At some distance above the stove, build a bed-like ceiling of wooden planks for the vapor to go through. On the planks, smaller planks are set to make a comfortable place for the patient to lie down. In Tibet these were branches and leaves of a tree called "*benne*." The patients should lay down for about forty minutes covered with blankets; the head should not be exposed to the vapor. At the end of a steam bath, dry the body, and perform a light massage.

This procedure can be simplified, for example, by placing a net-like wooden structure on a bathtub. There the patient can lie down. Medicinal ingredients are poured in the tub and water temperature maintained high to produce the necessary steam. Another method could be a makeshift diver's

suit or box, which prevents the dispersion of the steam, and also has a bottom layer where the medicinal liquid can be poured. The patient can then enter it, and expose only his or her body to the steam released from a fissure in the bottom portion of the container.

Medicinal Plasters

Medicinal plasters consist of the application of medicinal compounds right on the body area affected by a cold or hot disorder. First, prepare the appropriate medicine to apply to the plaster. Take 5 kg. of the ingredients, and boil them after adding *trona*. Once the juice of the ingredients is extracted, mix it with well-cooked barley. Add a fermenting agent, and let the preparation sit for three days as before. When it turns sour, and small bubbles appear on the surface, this indicates that fermentation has occurred. Take a thick gauze of the dimension you require, and fold it in two parts. Cut several vertical seams open in one end. Fill the seams with the medicinal extract. Put the gauze on the part of the body you intend, such as an affected nerve. Apply the gauze for several days, changing the gauze and medication every day. Plasters should not be applied to the eyes, cheekbones, achilles heel, testicles, and stomach or heart region. These restrictions do not apply to medicated baths and medicated vapors.

5 Massage

Massage in Tibetan language is referred to with two different terms that have the same meaning: "*giugpa*" and "*kunye*," which are interchangeable. However, "*ku*" in "*kunye*" denotes the application of medicinal oils or creams. "*Nye*" refers to the massage with different techniques such as rubbing and so forth. "*Giugpa*" also refers to the application of different oils, such as animal fat, melted butter, or various other medicinal creams as the disorder require. Massage and particularly massage ingredients should be learned from *The Conclusive Treatise*. Massage is indicated for dry and rough skin, depletion of blood and semen, physical weakness, aging, for grief and excessive mental activity and poor eyesight. It is also indicated for insomnia, fatigue caused by heavy work or too much work. Massage is not indicated for individuals with indigestion, bodily stiffness due to wind imbalance, mineral intoxication, loss of appetite, stomach inflammation and other dark phlegm disorders.

Chapter XVIII The Practicing Physician

1 Qualifications of a Doctor

The 31st chapter of *The Exegetical Treatise* is entitled *The Practicing Physician*. It describes the attributes, qualifications, and motivation required of a physician in a life of service. These include the six primary conditions for becoming a learned doctor, the definition of a doctor, the etymology of the Tibetan term "*menpa*" (doctor), and various types of doctors, including their activities and achievements. The six primary conditions are learning and intelligence, pure motivation, moral commitment, capacity, dedication, and conduct appropriate to the society. These are explained below.

Intelligence and Learning

Intelligence and learning refers to the attributes of erudition, firmness and sharp intelligence.

The Attributes of Erudition

Erudition refers to a correct understanding of the general and specific medical treatises and of their practical application. A doctor who possesses these attributes will understand condensed and extensive treatises of medicine.

Firmness

Firmness entails avoiding prevarication when making decisions. They will feel complete certainty when making a diagnosis, preparing medicine, and when treating.

Sharp Intelligence

Sharp intelligence is the capacity to comprehend and analyze subjects quickly and concisely. When diagnosing a patient, the doctor will comprehend even obscure illnesses and remedies not mentioned in the texts,

to the point that her knowledge will seem to be a kind of subtle and amazing precognition.

Intelligence and learning are the most important preconditions for becoming a qualified doctor.

Pure Motivation

Motivation of Bodhicitta

Pure motivation is understood as the altruistic spirit of awakening, wishing to lead all beings to freedom and awakening. Such spirit should manifest in the doctors' mind when he meets the patient.

Practice with Pure Motivation

When the doctor works with patients, or another person afflicted by suffering or problems, the doctor should listen to him or her with a benevolent disposition of wanting to be of help. Without discriminating between a good or bad patient, between friends or enemies, the doctor holds no grudges and is impartial toward all.

Dedication Merit

While performing treatments, he must think only of the patient welfare and health without setting limits of time to his service. They should be optimistic about whatever they did for patients.

Moral Commitment

To fulfill moral commitments, the doctor should always: cherish the six points, maintain two and three to appreciate.

The Six Points

- 1). To be able to cherish the teacher, seeing him as an enlightened being;
- 2). Respect his words as the advice of the sages;
- 3). Look upon the treatises of medicine as if they were the Buddha's own teaching;
- 4). Be loving and kind to fellow student/fellow medical practitioners as if they were one's brothers and sisters;
- 5). Be compassionate toward poor patients as if they were your children;

6) View blood and other liquids of the patient's body with complete equanimity, feeling no more repulsion than would a pig or dog who have no idea of clean or dirty. If you feel repugnance you will not be able to treat your patients effectively.

The Two Things to Maintain

- 1) Consider the teachers of the lineage like guardians.
- 2) View medical instruments as their insignia.

The Three Things to Appreciate

Medicines are comparable to a precious gem that realizes all wishes because through the medicines the doctor spontaneously acquires every necessity and realizes every aspiration.

- 1). They are like a nectar because they remove easily all illnesses.
- 2). Lastly, they are like an offering because well prepared medicines are a gift for the Medicine Buddhas and to the holders of the medical knowledge.

For these reasons, medicines should be prepared according to the correct recipe and procedure in ideal hygienic conditions.

Capacity

The doctor's ability to use body, language and thinking exceeds one of the most meaningful forms of art.

First, it displays, for example, the skill in performing blood-letting, moxibustion and other external therapies; that of making instruments to employ in these therapies with one's own hands;

Second, it also shows the ability in communication with the patient so as to comfort him with pleasing words and;

Third, it is reflected in diagnostic procedures and in advising and giving the suitable treatment in a clear and unmistakable way.

Dedication to Healing

Qualifications of a Good Doctor

Dedication is the quality by which one can become a good doctor and actually being helpful to patients. To become a qualified doctor, you should persevere in creating the basic cause, assembling the secondary circumstances,

and relying on helpful conditions and perseverance applied in order to become accomplished in the art of healing.

1). To create the basic cause, an aspirant doctor should first learn to read and write and receive a general education.

2). To assemble the secondary conditions, an aspirant doctor should study with a teacher who is a fully qualified physician, who has an extensive knowledge of the general and specific medical treatises, who has trained in clinical experience and have received oral instructions at the feet of a teacher, has a relaxed disposition, is not a cheat, does not pretend to be what he is not, and has a loving attitude for the patients. Study and rely on such a teacher without skepticism toward what he teaches. Follow his advice without hypocrisy, and that is in his presence or in private, conforming your behavior to the teacher's view. When you feel that you have progressed, even though slightly, in the knowledge of medicine, remember the kindness of your teacher, and motivate yourself to deepen even more your knowledge. In this way, you will rapidly acquire knowledge, and become an accomplished doctor.

3) To create the secondary circumstances, study every medical treatise worth reading; ask questions to clarify their words and concepts. With enthusiasm study and remember the difficult points, pondering and conducting the necessary researches.

4) To become proficient in the art of healing, persevere in learning any kind of practical application of medicine (*taught in the Treatises or oral instructions*) without discriminating their principles, and inquiring in order to dispel uncertainties, you will gain a skill enabling you to employ with self-assurance any therapy required for a given situation.

Preserve the Habit of Helping Others

Persevere in the habit of helping others without procrastinating the treatment that patients need and without discontinuing it because of other activities. Apply the appropriate treatment for a given illness with commitment and without delay, with the same effort and attention of the man that carried a bowl full of melted butter on his head across a high and narrow wall under the threat to be killed if he spilt even a drop.¹

¹ Ancient Tibetan folktale.

Conduct Appropriate to the Society

To Conform to Society

It is important for the doctor to conform to social conventions, receiving first of all a general education, then studying medicine. A doctor has to learn to adopt a behavior appropriate for the character of various patients. Sometimes he or she has to be very gentle, clever and to get along well with others. In these three ways, you will accomplish easily whatever you desire.

Develop Spiritual Qualities

In addition, develop spiritual qualities, such as controlling one's mind, being friendly and being contentment with what one has. With these mental dispositions you will be of help to yourself and others.

Conform both to Society and Spirituality

Conform to the society in which you are practicing medicine. Conform as well to the fundamental spiritual principles of taking great care of the sick and the poor with compassion. In this way you will be praised and honored by important people, and your aspirations will be fulfilled.

2 Defining the Doctor

A qualified Tibetan doctor is one who has a precise understanding of the nature and characteristics of the human body, including the three humors, the seven bodily constituents and the three impurities. One should also be proficient in diet, behavior, pharmacology and external therapy.

3 Etymology of the Tibetan Word "Menpa" (Doctor)

In the Tibetan language there are two terms used to refer to doctors: "menpa" and "Lhaje."

Etymologically "Menpa" means "to benefit." Doctors are referred to in such a way because they heal pain caused by disease, and bring physical well being. Because he or she is courageous and self-confident when performing minor surgical operations, a doctor is known as "menpa" where "pa" means "hero." In a different explanation, he is called "menpa" because, as a father, he takes care of all.

In ancient times, kings in Tibet were honored with the title "mi'i lha" which means "divine among man." Since even kings revered doctors, they came to be known as "lhaje" (*revered by the king*), and are called that nowadays.

Nowadays in the region of Lhasa (*but not in Eastern Tibet*), doctors are called "amchi." "Amchi" is not a Tibetan term, but a Mongolian word. This term and other Mongolian terms as well as Mongolian clothing were introduced in Tibet during the 17th century. At that time Lhasa was governed by the King of Tsang (*the region that has Shikatsé as its most important city*).

Sönam Namgyel (*Bsod nams rnam rgyal*), as official of the Cisho family and Sönam Rabten (*Bsod nams rab brtan*, the chamberlain of the Fifth Dalai Lama) plotted to overthrow the Tsang rule and on different occasions between 1617 and 1638, called upon the intervention of the Mongolian army. Central Tibet, the Mongolian army and the monks from the Monasteries of Sera and Drepung, united and waged a war against the Tsang King and defeated him. In 1642 under the patronage of the Mongolians, the Ganden Podrang government was entrusted with the Dalai Lama as the head. For some time there was a sort of Mongolian influence in Lhasa. Mongolians themselves ruled Tibet from 1707 to 1717. In that period Tibetan aristocrats introduced Mongolian words and customs.

4 Types of Doctors

Unsurpassed Doctors

Doctors can be of three kinds: unsurpassed, special and ordinary. The unsurpassed doctor is the one who has the capacity to cure all diseases caused by the three humors and from ignorance of the very nature of things, that is to say the very basis upon which attachment, aggression and dim-wittedness (*the causes of the three humoral imbalances*) develops. Examples of such doctors are the Medicine Buddha and Shenrab Miwo the teacher of Bon.

Special Doctors

The special doctors are those who possess the direct knowledge of others people's minds, are benevolent, compassionate and blessed with the altruistic spirit of enlightenment. Such qualities enable them to alleviate the suffering of others, and to foster well being. Chebu Trishe, Yutog Yönten Gönpö and others were example of such doctors.

Ordinary DoctorsGood Doctors

Ordinary doctors can be good or bad. Good ordinary doctors are those who belong to a lineage, those who are well trained, and those who are familiar with medical practice.

1). In the first class are doctors that belonged to the lineage of royal doctors *(such as the personal physician of the king Nyatri Tsenpo and of the kings of the successive dynasties)*.

2). In the second class fall doctors who have studied medicine thoroughly at the feet of doctors from a royal lineage.

3). In the third class are found doctors who, although they have not studied deeply the medical treatises, have been trained in close proximity to a skilled doctor, and are familiar with medical teachings. They are like friends who work for the life of patients. In summary, a good doctor, belongs to a good family; they do not come from bad families of murderers, butchers, or those who have given up their moral commitments, nor from those who have married with relatives. A good doctor is wise. He or she keeps their commitments, are learned in the medical treatises, know how to prescribe the correct therapies that they have learned directly from their teachers. S/he is very familiar with and self-confident about all clinical applications. Such a doctor is dedicated to gaining authentic qualities, and does not feel bound to the eight worldly concerns. This type of doctor has a controlled mind, and feels love and compassion toward all without discrimination. He or she views the welfare of the patient as if it were their own, and makes every effort without distraction. They have a comprehensive knowledge of the medical theory and practice. Such doctors are like protectors for the sick and heir to the teaching of the ancient holders of the medical knowledge. Such are emanations of the Medicine Buddha.

Bad Doctors

There is also a type of doctor who is like an executioner who severs the life of the sick. This type practices out of personal interest and has little knowledge. They lack an extensive study of and have no familiarity with medicine. They think only of personal gain. In fact, they pretend to be doctors. Such charlatan doctors can appear in four different ways:

1). Some practice medicine after being chronically ill, healed by various therapies, and try to cure others;

2). Some practice medicine once they have read a few texts, i.e., after they have read some manuscripts of profound instructions on medicine.

3). Some pretend to be doctors but have only a few notions about medicine, i.e., that know only a few medical principles and a few medicines they heard about from others or from copying medical texts.

4). Some pretend to be doctors on the basis of the experience they have gathered traveling, for instance, those who trade in medicinal ingredients and for this travel in various regions and know the properties of plants.

Incompetent doctors are recognized by the following twelve shortcomings:

1) Belong to an ignoble family that is despised by both Buddhists and Bonpos. These doctors resemble a fox that takes possession of the lion's throne, the king of animals, but cannot rule them;

2) They are ignorant of the medical treatises, i.e., do not know how to use different therapies for the different disorders, cold or hot. These doctors resemble people who are born blind to whom various objects are shown as follows:

3). Lack first-aid and clinical experience, i.e., do not recognize the symptoms of illness, and are uncertain of the therapy, and unsure of outcome. These doctors resemble a person who ventures on an unknown path and arriving at a crossroads does not know where to go;

4). They have neither studied nor trained in diagnosis, thus, cannot recognize even one illness. These doctors are like a person who journeys to an unknown land where he has no acquaintances;

5) They are ignorant of pulse taking and urine analysis, thus, they are unable to say if the illness is of a cold or hot nature. Such doctors resemble a spy who does not know how to send the signal information to the barracks;

6) They do not know how to make a prognosis concerning the outcome of the illness, fatal or not, and, when their prognosis is contradicted by the outcome become shameful and gain a bad reputation being described as a doctor who does not know anything. This is like a chief who is unable to give a speech;

7) Such doctors are ignorant of the therapeutical principles, thus, though they are able to make a diagnosis, lacking general and specific knowledge, the therapy they prescribe will be ineffective. These doctors resemble a person who shoots at a target in the dark;

8) They are ignorant of diet and behavior suitable to specific physical constitutions, thus, they aggravate the condition of their patients. These doctors resemble a person whose village turns into enemies;

9) They do not know how to prepare pacifying medicines appropriate for various illnesses, and therefore, they will choose an excessive, insufficient or wrong medication. These doctors are equal to a farmer who does not know how to tend his fields;

10) They do not know cleansing methods and will apply them at the wrong time, causing both the illness and body not to respond to treatment anymore. These doctors resemble those who pour water down a sand dune, so that both sand and water flow away;

11) They lack proper medical instruments and medicines, thus, they will not be able to overcome the enemy of illness. These doctors resemble warriors without armor;

12) They have no knowledge of blood-letting and moxabustion points, thus, they will not be able to orient these therapies toward the illness. These doctors are like thieves who enter a house without knowing the secret hiding places.

Incompetent doctors with these shortcomings will fail to understand whether the illness is serious or not. They will prescribe the inappropriate therapy, thus, they resemble the lord of death, wielding his noose. Avoid these doctors. They insert a wedge at the base of the pillar of life of the patient and his or her ministers.

5 The Doctor's Work

Common Practice

Work with the Body

A doctor's daily practical routine entails the preparation of medicine, care of medical instruments, and the efficient therapeutic evaluation of patients.

Work with Speech

A doctor spends countless hours communicating to patients about their illness, the regimen to be followed, and prognosis—whether they can or cannot be cured. A prognosis is a delicate matter: the outcome can never be 100% foreseeable. In fact, the outcome of an illness can vary because of diverse factors. One must account for the luck, previous actions, capacity

and merits of both doctor and patient. It is the doctor's responsibility even in very serious cases to reassure the patient that there is possibility of recovery. Such encouragement lightens the patient's spirit. It gives them courage. A heartened attitude can contribute to the healing of even fatal disease. When an illness is more superficial, the doctor should advise the patient to take the necessary precautions. For example, a patient can possibly die. A patient's neglect of diet and behavior can aggravate symptoms to the point of death.

Work with the Mind

A doctor should set aside time in his daily life for contemplation of medical theory and practice; thinking about how to help patients; and researching the various relationships between illness and remedies.

Advanced Practices

Attitude

There are also some more exceptional activities to which a doctor must attend. These involve more spiritual aspects of life, inner attitude, meditation and conduct. According to the ancient commentaries to *The Four Medical Treatises*, the view of the doctors should accord with the Madhyamaka, or the philosophy of the middle way. Zurkharwa, however, disagrees with this interpretation. He explains, rather, that the "middle way" spoken of in *The Medical Treatises* refers to having a balanced, truthful viewpoint, which shuns the extremes of mistakes, excess, or deficit in any aspect of medical practice.

Meditation

The Four Treatises on Medicine specifically instructs the student-doctor on meditation. It states that the doctor should ponder and cultivate "the four boundless thoughts." Old commentaries explain the four boundless thoughts to be four levels of meditative absorption. Zurkharwa states that the four boundless thoughts are love, compassion, joy and equanimity. Thus, a doctor should cultivate love by wishing that the patient attain well-being and that the conditions for this be found. The doctor should cultivate compassion by wishing the patient become free of pain and its causes. To cultivate joy, the doctor should wish for the permanent health and happiness of a patient. By equanimity Zurkharwa refers to the doctor overcoming the eight worldly concerns, embracing all, and becoming devoid of attachment to friends and aversion to enemies. The doctor should also be on guard

against falling into the four attitudes that deviate from the four boundless thoughts. These four attitudes are as follows: love for the wicked that do not repay the kindness of others; compassion for those who are hostile to others and to the spiritual teachings; desire that a patient treated by another doctor dies; and being insensitive to a dying patient.

Conduct

1) How to give up the ten negatives: The special conduct of the doctor consists in shunning the ten negative actions and practicing the opposite ones. *The Eighteen Writings of Yuthok* explains how to shun the ten negative actions in the context of the medical profession.

(1) Do not kill to heal a patient. (2) Do not steal from the house of the patient. (3) Do not have intercourse with the patient's wife. (4) Do not lie, inspiring false hope in a terminally ill patient who does not want treatment. (5) Do not slander in a way that pits the nurse against the patient or vice versa. (6) Also, do not speak nonsense to the patient, saying for example: "Oh, you will die soon!" (7) Do not offend the patient with reproachful words; (8) Do not try to take the patient's favorite things; (9) Do not apply harmful therapies to the patient; (10) Do not have the perverted idea that it is better if the patient dies.

Other negative activities are as follows: (1) Do not behave like a madman. Moreover, a good doctor does not behave like a senseless madman, disregarding other physicians who are more expert, or concentrating solely on food and wealth. (2) Do not behave like a swindler: such as deceiving others by pretending to be clairvoyant, and disregarding the patient for the sake of drinking alcohol or laziness. (3) Do not behave arrogantly when lacking any quality. Do not scorn ones' colleagues, by boasting wealth if you are poor. (4) Do not behave like a fool, carelessly, performing treatments that can cause the arising of other illnesses without taking the necessary precautions; or by insisting on applying the treatment when a patient is on the brink of death. (5) A doctor should never behave vilely, such as borrowing medicine or medical instruments from others. A doctor should never treat patients only on the basis of theoretical knowledge without making any effort to learn the practice.

2) How to Put into Practice Ten Positives: The physician should also dedicate himself to meaningful deeds that lead to perfection: liberality, ethics, patience, and enthusiasm. In *The Eighteen Writings of Yuthok*, these practices are explained in the following way. Liberality is of three types. To be generous and not miserly is the liberality of material things. Comforting the patient's mind is the liberality of bestowing the teaching. The gift of life to the patient is the liberality that protects from fear. Ethics is being free of pretension and deceit. Patience is acceptance of the patient's anger and frustrations. Enthusiasm refers to not being lackadaisical in diagnosis and in treating the patient enthusiastically. In the context of medicine, the two other means of perfection (*which in general are six*), meditation and discriminative awareness, are part of the balanced and honest view that shuns the three extremes. Such vision depends essentially on discriminating awareness, thus, this last is included in the recommendations—meditation in this context includes the cultivation of the four boundless thoughts.

6 The Doctor's Accomplishments

Provisional Results

The accomplishments gained through the medical profession are twofolds; provisional and final. An individual who becomes a doctor, upon completion of the medical treatise, gains authority and wealth; these attributes bring happiness in life. When a doctor is knowledgeable and experienced, these qualities will be recognized and appreciated. This type of doctor will be able to evaluate other people's minds and can work in harmonious conformity to the ways of the world. His or her benevolence will encompass even their enemy as a brother. By virtue of such qualities he or she will become renowned, and will acquire without striving for comfort and wealth.

Final Results

By dedicating themselves to the sick, and by renouncing selfish machinations, such a doctor will ascend to the state of a fully realized being, symbolized by the Medicine Buddha.

Tibetan traditional culture teaches our doctors the following codes of behaviors:

Overcome selfishness, bitterness, miserliness, and deceit. Cherish the altruistic spirit, seeking inner awakening while dedicating yourself to the alleviation of the suffering of the sick. Rather than associating with high-ranking persons or doing profitable business, take care of destitute patients. Prescribe medicines and therapies to all patients—not just the famous, the important or ones friends. Overcome attachment to dear ones, and repulsion from others. Become the doctor of all. With compassion, with the three white foods (yogurt, milk and butter). Do not adorn yourself. Rather than riding horses or donkeys, travel on foot as a servant of the sick. Do not feign knowledge, but continue learning even as you grow old. Orient your actions, speech and thought toward higher inner goals and make preparations for the next life.

Chapter XIX

Diagnosis Through Pulse

1 Pulse preparation.

The pulse is like a messenger that conveys information to the doctor on the nature of the illness that effects the patient, thus, a precise examination of the pulse is of a fundamental importance.

The nature of the foods that the patient consumes during the day that preceeding examination influence the characteristics of the pulse. Food and drink such as meat and alchol, which have a very hot and nutritious nature give to the pulse. Characteristics that are similar to those that indicate the presence of a hot disorder.

Similarly, foods that have a very cold nature or that are difficult to digest such as rough and cold foods give to the pulse characteristics that are similar to those that indicate a cold disorder. It is, therefore, necessary that prior to pulse examination the patient avoid an unbalanced diet: avoiding over-eating (a condition that would give the pulse the characteristics that resemble those indicating a hot disorder). It is also inappropriate to remain on empty stomach as it would give to the pulse characteristics that are similar to those indicating a cold disorder; patients should also abstain from sexual intercourse and from all forms of physics and metal excess.

Following these reccomandations, the pulse examination will be clear and accurate in its diagnostic indications.

Concerning this Mipham Rinpoche's Commentary to the pulse and urine examination. Oral Instructions of the Anachorets makes the following Observations.

When one has over-eaten, the pulse becomes emergent and tight; when one is on empty stomach, the pulse is submersed and weak. Sexual intercourse, talking too much, and other such activities agitate the wind humor, and give the pulse characteristics that resemble those indicating wind disorder. The excess in physical activities give the pulse a rough quality, while with relaxation those characateristics of the pulse that clearly indicates the nature of the disease manifest by themselves clearly and spontaneously.

2 The Right Time for Pulse Examination

The right time for pulse examination is of crucial importance for its reliability. The best time is at sunrise, i.e. when the sun has risen in the sky, but before its rays have touched the ground. At this time the patient has just woken up, has not yet moved from his bed and has not taken any food. Talking and other activities of the patient have not yet caused the warm winds to flow outside the body with the breath, and the cold air of the environment has not yet entered the body, and mixed with the breath. The breath of day and night is in a state of balance, thus, the pulsating vases are in their natural condition. This is the right time for examining the pulse.

Traditionally six characteristics are spoken of to distinguish the ideal period for pulse examination: the sunrise, the rays of the sun not having reached the ground, the warm winds of the body not having flown outside; the cold winds not having entered the body; the patient not having moved from his bed; the patient being on empty stomach. This is the time when the breath of day and night are in a state of balance, and when, having risen from sleep, the waking state begins.

3 The Place where Pulse is Examined

To locate the examination spot, measure a thumb (the patients thumb) from the first fold of the wrist toward the arm. Examine the pulse at the radial artery. Starting from this point (which faces the hiphophysic of the radius), place the forefinger, medium and ring fingers side by side. The forefinger is positioned close to the hand. The three fingers are applied uniformly, nearly in contact with each other, but without being pressed together or too far apart. Arteries are found throughout many parts of the human body, yet pulse examination has to be done only at the radial artery at the wrist. Other arteries, the arteries of the neck, for example (which are among the eight arteries originating at the earth and where blood and wind flows together), being too close to the heart are not suitable for examination. The information that the pulsating waves of such arteries provide are unclear, being similar to the words of a conversation taking place on the banks of a river that descends roughly from a mountain side. The arteries of the feet too, being very far from the heart, are not appropriate for examination. The information coveyed by such pulsating

waves are like the tales of a traveller who has been on the road for years and months. Such tales contain some truth, and some lies as the situations they recall may have with the time changed. Being neither too far from nor too near the heart, the radial arteries at the wrist represents the ideal spot. The information that such pulsating waves convey are clear and understandable as the words of a conversation that takes place on a windless summer day, one mile distant. Sider of such that the patient through the pulse examination? Examining the pulse, the doctor can understand the illness of the patient much in a way as from listening to the tales of the merchants who come from different regions gather in a big market place. One can learn about different characteristics of the regions these merchants come from. The organs of the human body are obviously not located at the wrist, nonetheless, through the pervasive wind, the blood that flows in different hollow and solid organs comes to circulate at the wrist. Such blood accompanied by wind, having flown in various organs, conveys the information that enables the doctor to diagnose the disorders of the various organs, as from the words of merchants it is possible to know the wealth and other characteristics of the doctor, i.e. countries he has visited.

How does the doctor recognize the malfunction of various organs through the pulsating waves of the blood that runs through a single artery? Within the single weave of a fabric, different lines can be visible, likewise, by virtue of natural law, the pulsating waves of a single artery of the wrist is identifiable in twelve sectors (defined by the edges of the six examining fingers of the doctor's hand) in which the blood flows (connected to twelve organs). The order in which the physician's fingers examine the pulsating waves connected to the various organs reflects the order of closeness or distance in which the organs are located from the wrist, and the consequent intensity of the pulse related to these organs. Since the placement of the three examining fingers is related to the intensity of the pulsation of the various organs, the three fingers could be placed at the different level of the radial artery on the arm.

However, the spot indicated before, a thumb below the first wrinkle of the wrist is the ideal one because the bones (that are in a certain sense the "base" for the radial artery at that spot have a regular shape and the flesh in that spot is neither too thick nor too thin. Thus, the characteristics of this spot give the doctor's finger a clear tactile perception.

Concerning this point, Mipham, in his commentary on The Examination of the Pulse and Urine states when one examines the pulse with the fingers, it is

not necessary to recognize the pulse associated to each organ. First, one understands the general characteristics of the pulse determined by the nature of a disorder, for example, a strong pulse indicative of a disorder of a hot nature or, the slow pulse indicative of cold disorders, or the missing pulse indicative of wind disorders (or the condition of a person that is close to death): These different characteristics of the pulse are determined by tiny microorganisms present in the blood, which can in a single instant move throughout the entire body.

The condition of the life protective energy of the individual or bla is examined at the ulnar artery at the lower edge of the wrist, between tendons and ligaments. An absent pulse indicates that the life protective energy is in critical condition. At the moment of death the pulsation of the arteries stops gradually, starting from the arteries of the top of the feet. Thus, to determine if the process of death has started, one examines the arteria dorsalispedis on the foot.

4 The Extent of the Pressure Applied by the Physician's Fingers

In examining the pulse a different pressure is applied with the different fingers: the forefinger should just press the skin, whereas the middle finger should press the muscle, and the ring finger should press down on the bone. The reason for the different pressure applied by the three fingers is that the radial artery, as suggested by the shape of a raddish, enters in depth in the region of the arm toward the elbow, where the thickness of the flesh is relevant while it emerges towards the hand where the flesh is less thick.

5 The Manner of the Examination

To be sensitive, the hands of the doctor need to be smooth and flexible, graced with a natural warmth, devoid of roughness and of a thick skin that develops with manual work. And at the time of the examination the hands should not be numb with cold.

In the case of a male patient, the physician's right hand should first examine the patient's left wrist. Under each finger, two pulses of two organs are felt. The upper edge of the forefinger examines the pulse of the heart; with the lower edge examine the pulse of the small intestine. The upper edge of the middle finger examines the pulse of the spleen; the lower edge

examines the pulse of the stomach. The upper edge of the ring finger examines the pulse of the left kidney; the lower edge examines the pulse of the seminal vesicle. Then, the physician left hand examines the patient's right wrist. The upper edge of the forefinger examines the pulse of the lungs; the lower edge examines the pulse of the large intestine. The upper edge of the middle finger examines the pulse of the liver; the lower edge examines the pulse of the gall bladder. The upper edge of the ring finger examines the pulse of the right kidney; the lower edge examines the pulse of the urinary bladder.

In the female, the pulses perceived under the fore fingers are reversed from the position they are in man (i.e, between right and left). On the right wrist of the female, the pulse of the heart is examined; on the left wrist the pulse of the lungs is examined[4]. The positions of other pulses is identical with that of the male. The Conclusive Treatise states that such a diversity accounts for the different direction in which the tip of the heart of the male and female points to. However, this statement is to be understood in the sense that the cavity of the heart is different in the male and female where wind and mind flow or the manner in which they flow.

6 Three Constitutional Pulse Types of Ordinary Persons

The pulse of a healthy person can be one of three main constitutional types: male, female, and bodhisattva. The male pulse is bulky and characterized by a rough motion that resembles that of wind disorders. The female pulse is thin and characterized by a rapid motion that resembles that of bile disorders. The bodhisattva pulse has characteristic that stand in between those of the bulky male pulse and subtle female pulse, and it is characterized by a long and smooth motion totally free of tension, which resembles the pulse of phlegm disorders. A male endowed with a feminine constitutional pulse has a long life; a female endowed with a masculine constitutional pulse gives birth to many boys; a male or a female endowed with the bodhisattva's pulse is seldom sick, has a long life, and is loved by the spiritual guides, by his superiors, etc., but he or she is hated by his collaborators, bad people and his inferiors; and receives unfriendliness from nephews, uncles and aunties. Persons endowed with a bodhisattva pulse will have their family lineage interrupted, and thus extinct. When both male and female in a couple are endowed with the masculine constitutional pulse, the children will be mainly boys. When both male and female in a couple are endowed with a feminine constitutional pulse, the children will be mainly

girls. If one of the partners has a bodhisattva's pulse type and the other a feminine or masculine pulse type, only one child will be born: a boy if the other partner in question has a feminine pulse; a girl if the other partner has a masculine pulse.

7 Seasonal Pulses in Relation to the Five elements

In pulse examination one should consider the four elements and the four seasons in an outer level. The elements are associated with each season in the following way: wood-spring, fire-summer, earth-autumn, and metal-winter, and water winter. The earth element is associated to "seasonal junctions." On an inner level, the five elements are associated with the organs of the body in the following way: fire-heart, metal-lungs, wood-liver, earth-spleen, and water kidneys. On a hidden level, the elements are associated with the pulse of the various organs [5]: the pulse of the heart associated with fire, the pulse of the lungs associated with metal, the pulse of the liver associated with wood, the pulse of the spleen associated with earth, and the pulse of the kidneys associated with water. According to the Tibetan calendar based on the cycles of the moon, spring begins around the sixth of February (that generally constitutes the first month of the Tibetan year). Spring has three months each comprising thirty days. The three months of each season are characterised by the so called "three immutable signs" that indicate the advent of the season: the immutable sign of the sky, the immutable sign of the earth, and the immutable sign between sky and earth. In spring, the immutable sign of the earth is the blossoming of the trees. The immutable sign of the sky are constellations that indicate the hours of the night during the first month, the constellation Regulus; during the second the constellation Beta Leonis; and during the third the constellation Spica Virginis. The immutable sign between sky and earth is the lark that flies about and sings from the first beginning of these signs and for a period of seventy-two days, the characteristic pulse is that of the liver associated with the wood element. This pulse is thin and tight, thus, it resembles the singing of the lark. In the remaining eighteen days of this season the pulse is that of the spleen associated with earth, according to the Tibetan calendar, starts around the seventh of May. In summer, the immutable sign of the earth is the blossoming of flowers and the rain. The immutable signs of the sky are the constellations that indicate the hours of the constellation Antares, and during the third month the constellation

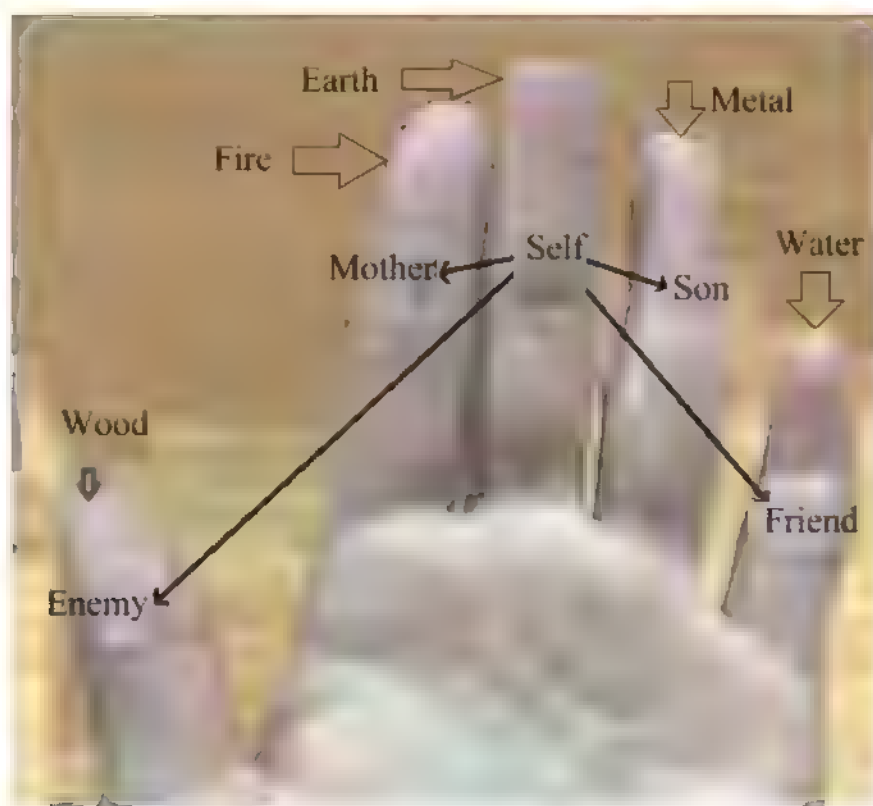
Sagittarius & the night: in the first month, it is the constellation Libra; during the second-month, the immutable sign between sky and earth is the singing of the cuckoo, the king of births. From the moment in which these signs appear, and for a period of seventy-two days the characteristic pulse is that of the heart associated to the fire element. This pulse is bulky and has a long motion, thus, it resembles the cuckoo's song. In the remaining eighteen days of this season the characteristic pulse is again that of the spleen associated with the earth element.

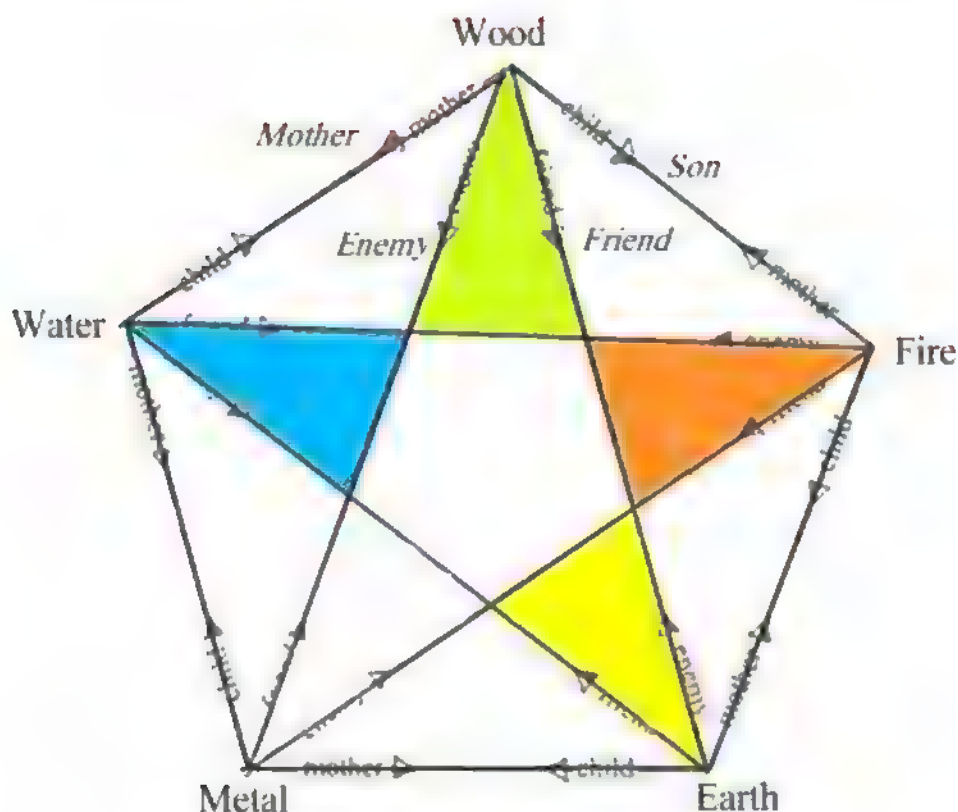
Autumn starts around the sixth of August. The immutable sign of the earth is the ripening of fruits and crops. The immutable sign of the sky are the constellations that indicates the hours of the night: during the first month the constellation Alpha Aquila; in the second month the constellation Pegasus, and in the third month the constellation Aries. The immutable sign between sky and earth is the grasshopper that having grown wings rises in the air with the sound "frek frek." From the first appearance of these signs and for a period of seventy-two days, the characteristic pulse is that of the lungs associated to the metal element. This pulse is short and rough, thus, it resemble the sound produced by the grasshopper. In the reemaing eighteen days of this season, the pulse is that of the spleen associated with the element. Winter begins around the six of November. The immutable sign is the freezing of earth and water. The immutable signs of the sky are the constellations that indicates the hours of the night; in the first month the constellation Taurus; in the second moth the constellation Orion, and in the third month, the constellation Cancer. The immutable sign between sky and earth is the cry of the small black deer. From the first appearance of these signs and for a period of seventy-two days, the characteristic pulse is that of kidneys associated with the water element. This pulse is smooth and slow, thus, it resembles the singing of the sandpiper. In the remaining eighteen days of this season, the pulse is that of the spleen associated with the earth element. Adding together the days in which the spleen pulse is associated with the earth element, and occur in the "seasonal junctions," there are seventy-two days. The pulse in the seasonal junctures is short and smooth, thus, it resembles the singing of a sparrow.

(Put the following section after in the section of seven astonishing pulses?)

In pulse examination, the relationship between the five elements are evaluated on the basis of the four cycles of mother, son, enemy and friend. To mention such cycles briefly: the son of wood is fire; the son of fire is earth; the son of earth is metal; the son of metal is water; the son of water is wood. The mother of wood is water; the mother of water is metal; the mother of metal is

earth; the mother of earth is fire; the mother of fire is wood. The enemy of wood is metal; the enemy of metal is fire; the enemy of fire is water; the enemy of water is earth; the enemy of earth is wood. The friend of water is fire; the friend of fire is metal; the friend of metal is wood; the friend of wood is earth, and the friend of earth is water. At the time of pulse examination the element associated to the sesonal pulse is to be recognized (as well as the other elements that associate to it according to the four cycles). For example, during the three months of spring, the reference point for the four cycles'evaluation is the natural liver pulse associated with the wood element. The element of such a pulse is evaluated in relation to the kidney pulse which is associated with the water element (mother of wood); in relation to the heart pulse associated with the fire element (son of wood); in relation to the lung pulse associated to the metal element (enemy of wood) and in relation to the spleen pulse associated to the earth element (friend of wood). How exactly this is done, will be explained in the context of the seven mazing pulses.





8 Healthy pulse

The Frequency of Pulsations Distinguishing Health and Disease. The number of pulsation in a healthy person is five beats during one full respiratory act of a healthy and young doctor: two beats during exhalation of the breath, two during inhalation and, one beat between exhalation and inhalation (i. e., during the respiratory pause). This is the normal frequency of a healthy person. Such regular pulsation frequency can manifest one or two times, but to be certain that the pulsation really indicates a healthy condition, such frequency should be examined up to one hundred beats. A normal pulse has a uniform flow with no changes nor defects: it does not alternate between strong, weak, tight and loose. Sometime submersed and other times emergent; neither halting nor non-uniform in that it is perceived differently by the upper part and lower part of the physician's fingers, non-uniform in that one of the pulses does not beat simultaneously with the others.

In terms of minutes and hours, a respiratory act occurs in four seconds: fifteen in a minute; nine hundred in an hour and twenty-one thousand and six-hundreds in twenty-four hours. [7]. Thus with every respiratory act five pulsations occur. With fifteen respiratory acts seventy-five pulsations occur. If the pulsation has such a frequency, it is a normal pulsation indicating a healthy condition. The pulse of a sick person has a frequency with characteristics that are opposite to those just described. A pulse rate superior to five pulsations for a respiratory act indicates a disorder of hot nature, while a pulse rate inferior to five pulsation for a respiratory act indicates a disorder of cold nature. In this regard the doctor Trabum states the following:

In excess the pulsations [indicates a disease] of a hot nature deficient [a disease of] cold nature. A pulse rate of seven beats indicates a severe fever; of eight a very severe fever and; of nine a fever beyond recovery as it has crossed its limit. A pulse rate of four beats during a respiratory act indicates a disease of a cold nature; of three beats a medium cold disease, of two a severe cold disease and, of one a cold disease that is incurable because it has set in the depth of the organist.

However, there are healthy persons that congenitally present an irregular pulse of different kinds, such as the pulse that resembles a string of pearls of different dimensions. Moreover, in some persons, the radial artery is not located in the internal side of the wrist passes over to the dorsal part of the wrist. This defect can be of three different kinds: the artery passing over the dorsal part of the wrist at the spot where the forefinger is placed for the pulse examination; an artery passing over where the middle finger is placed and; an artery passing over where the ring finger is placed. The pulse related to some organs may be totally missing in some healthy persons, or missing at certain times; or indistinct at times, then re-starting; or two beats are perceived in the same spot, or the beat sometimes strong and at other times slow (under all finger).

When the pulse is examined, a physician should first inquire about his or her Constitutional pulse (as to determine if it is masculine, feminine, or neuter, or if it has congenital defects such as being a halting pulse, etc.) If the physician do not know the constitutional pulse of the patients, his diagnostic pronouncements will be inaccurate. In fact, a masculine pulse (bulky and rough) 4, the feminine pulse (thin and swift) and, the pulse of a pregnant woman

(protuding and rotatory) can be mistaken for a pulse indicating a disease of a hot nature, to which these congenital pulses resemble. However, if one examine carefully such congenital pulses, their frequency does not exceed the rate of five beats for a respiratory act.

The bodhisattva pulse, which is long and smooth, can be mistaken for a pulse indicating a cold disease. However, if one examines carefully this pulse, its rate is normal; thus, by virtue of knowing its frequency, it cannot be mistaken. Likewise, a pulse that is totally missing, or a halting pulse, can be taken as a pulse indicative of death. Thus, to avoid the consequences of confusing constitutional pulses or congenital defects for pathalogical signs appearing during diseases, the physician who does not know a patient should question the patient throughly as to his or her constitutional pulse.

2 Pulsations that Indicate Disease

General Pulses that Indicates Diseases of Hot and Cold Nature

In pulse examination, the cold or hot nature of a disease is to be identified through two sets of six general pulses. The pulse indicative of a hot disease has the following characteristics: strong, emergent, rotatory, swift, tight and full. The pulse indicative of a cold disease has the following characteristics: weak, submerged, indistinct, slow, loose and empty. 11. Three characteristics of each of the two sets describes the nature of the pulse while three of each set describe the set mode of the beat. [8]

The following is the table of the six characteristics of the pulse indicative of hot diseases and their opposites, the six characteristics of cold diseases

Characteristics	Opposite
Strong	Weak
Emergent	Submerged
Rotatory	Indistinct
Swift	Slow
Tight	Loose
Full	Empty

The following table distinguishes the two sets of six characteristics in those describing the nature and those describing the mode of the pulse

Pulse indicative of hot diseases		Pulse indicative of cold diseases	
Nature	Emergent	Nature	Submerged
	Tight		Loose
	Full		Empty
Mode	Strong		Weak
	Rotatory		Indistinct
	Swift		Slow

[8] As for the nature of the pulses indicative of hot disorders: the emergent pulse emerges at the surface of the skin; the tight pulse resembles the cord of a bow; the full pulse is filled, and does not become empty when pressed. In terms of their mode, the strong pulse is intense; the rotatory pulse moves protruding into the flesh, and the swift pulse is rapid.

As for the nature of the pulses indicative of cold diseases: the submerged pulse is felt in the depth of the flesh; the loose pulse resembles the sensation of touching a woollen tread; the empty pulse becomes empty and imperceptible under pressure.

In term of the mode, the weak pulse has little intensity; the indistinct pulse is unclear, and has minimal motion, thus, being an obscure pulse; the slow pulse has a slow beat. 9

Among the various pulses, which are characterized by a strong or emergent beat, is indicative of superficial fevers, that is to say newly contracted disturbed fevers/g. The pulse characterized by a rotating and swift beat is indicative of "intermediate fevers" that is to say newly contracted flue. The pulse and full beat is indicative of a old, deep or cronic fever, characterised by a thigh.

Though the term "old" here (gnyugs) (in the case of a fever) indicates chronic fevers, when used for cold diseases indicates a newly contracted cold disorder, and superficial and intermediate cold diseases refer both to chronic cold disorders. The reason being for this inversion of meaning is explained by Mipham in the following passage from his Commentary on the Pulse and Urine Examination

There is a superficial fever that manifest in the skin and in the flesh; an intermediate fever that manifests in the bones and in the marrow. Both are newly contracted fevers that, once spread to the organs, become chronic fevers. Cold diseases instead, manifest first in the organs and when they become chronic spread to the flesh and the skin. The pulses associated to these fevers and cold conditions are likewise associated in the same way.

Pulses Indicative of Specific Diseases

Examination of Specific Diseases

1) The pulse indicative of wind disorders floats at the surface, halts, and becomes empty when pressed.

2) The pulse indicative of bile disorders is thin and has a tight beat.

3) Pulse indicative of the "white phlegm disorders" is submerged, and has indistinct beat.

4) The pulse indicative of complex diseases of fever wind is empty, and has a swift beat.

5) The pulse indicative of complex diseases of phlegm and bile is submerged when felt at the surface, but tight when felt in depth.

6) The pulse indicative of complex diseases of phlegm and wind is empty, and has a slow beat.

7) The pulse indicative of diseases known as "dark phlegm" is bulky and full, with the pulses felt under the middle fingers which are limping (i.e., weak compared to the others).

8) The pulse indicative of blood diseases is protruding, and has a rotating beat.

9) The pulse indicative of serum/limphatic diseases trembles, and moves with difficulty.

10) The pulse indicative of diseases caused by microorganisms is sticking and flat in its breadth. This means that the pulse seems to envelop or embrace the physician's fingers and gives the idea of being flat.

11) The pulse indicative of leprosy is limping (in the pulse of one or the other organ), trembling in a way that resembles skin tremor.

12) The pulse indicative of a disturbed fever is bulky, emergent, protruding, and its beat is rotating

13) The pulse of a fever caused by a contusion is thin, full and tight.

14) The pulse of a contagious fever is thin and quick.

15) The pulse indicative of an infectious condition is sticking, and gives the pression of a double beat (concurrent, one strong and the other soft).

16) The pulse indicative of acute pains is short and fluttering like the corner of a flag moved by wind

17) The pulse indicative of a poisoning caused by a compounded poison is short and with many protuberances, at times strong, and at time weak and unclear (leaving the physician in the doubt as to the nature of the disease).

18) The pulse indicative of a food poisoning caused by bad meat is thin, submerged, has a swift motion, and the pulse of the organ effected by the poisoning is limping.

19) The pulse indicative of an immature fever is thin and swift, and fluttering like a flag.

20) The pulse indicative of fully developed fever is tight and has a strong beat.

21) The pulse indicative of a void fever is empty and swift

22) The pulse indicative of a concealed fever is submerged and tight in its depth.

23) The pulse indicative of a chronic fever is thin and tight.

24) The pulse indicative of a turbid fever (associated to serum/lymphatic disorders) is thin, and has a swift beat in its depth.

25) The pulse indicative of a fever caused by wounds or ulcers is bulky, full and quick.

26) The pulse indicative of pain (caused by weapons or a foreign body) is limping in the pulse related to the organ or the part of the body (upper or lower) where there is the foreign body (a bullet or another), and seem to be concurrent.

27) In cases of cranial trauma, if the muscles are injured, the pulses felt under the forefingers are strong.

28) If the bones are injured, the pulses felt under the middle fingers are strong.

29) If the brain is injured, the pulses felt under the ring fingers are strong.

30) The pulse indicative of pus in the body is trembling: if the area in which the pus is present is effected by fever, the pulse is short and fluttering.

31) As for cold disorders, the pulse indicative (of a new) indigestion is bulky, full and slow.

32) The pulse indicative of a chronic indigestion is thin and a weak motion.

33) The pulse indicative of tumors is weak, and has a limping beat related to the organ or the part of the body effected by the tumor.

34) The pulse indicative of anemia, oedemata and severe oedemata is strong, thin and submerged, with intense beat in its depth.

35) The pulse indicative of a severe vomit is weak in proximal part of the wrist. The pulse indicative of severe diarrhoea is weak in the distal part of the wrist. Some of the pulses just mentioned presents characteristics that are similar, thus, let us distinguish them with the following table.

Pulse	Similar characteristics	Dissimilar characteristics
Diseases of the blood	Floating	Full in its depth
Wind disorders	Floating	Empty in its depth
developed fever	Swift	Intense in its depth
Void fever	Swift	Weak in its depth
Phlegm	Submerged	Submerged in its depth
Dark phlegm	Submerged	Tight in its depth

Examination of the Areas of the Body Where Diseases Manifest

With the forefinger the physician examines the pulses related to the lungs and the heart which are located in the upper part of the trunk to determine the presence of diseases in these areas. With the two middle fingers the physician examines the pulses related to stomach and the liver, which are located in the middle part of the trunk. With the two ring fingers the physician examines the pulses related to the kidneys and the waist which are situated in the lower part of the trunk. The upper edge of the fingers examine the pulses of the solid organs: these are known as "positive" pulses (gdags rtse). The lower edge of the fingers examine the pulses of the hollow organs: these are known as "negative" pulses (srib rtse). In his Commentary to the Examination of Pulse and Urine, Mipham explains why these pulses are called negative and positive respectively.

The pulses felt with the upper edge of the fingers and which are associated to the hollow organs as well as the pulsations that occur during exhalation are called positive. The pulses felt with the lower edge of the fingers and which are associated to the solid organs as well as the pulsations that occur during the inhalation are called "negative"[12]. These pulses are so called because the solid organs have a more intense flow of blood, and their pulse is the

method pulse. In comparison to the pulse of the hollow organs, that of the solid organs is slightly stronger, thus, it resembles that of hot disorders. The hollow organs have a more intense flow of wind; their pulse is the wisdom pulse. In comparison with the pulse of the solid organs, that of the hollow organs is slightly weaker and void, thus, it resembles the pulse indicating cold diseases. Thus, when compared with each other, the pulses of the solid and hollow organs are posited respectively as "positive" and "negative" pulses. The two pulsations that occur during exhalation are slightly more intense than those that occur during inhalation. Thus, because of their diversity the pulsations that occur during exhalation and inhalation are also called respectively "positive" and "negative." If one examines associated with the same element cannot be effected at the same time, one by a cold disorder and the other by a hot disorder. Nonetheless, there are cases, though rare, in which this can happen. For instance, it is possible to have (at the same time) a hot disease of the heart with and a cold disease of the intestine, but it is impossible to have (at the same time) a hot disease of the intestine with a cold disease of the heart. Similarly, it is possible that a hot disease manifests in the upper part of the body simultaneously with a cold disease in the lower part of the body, but it is impossible to have (at the same time) a cold disease in the upper part of the body and a hot disease in the lower part of the body.

The following table lists the case in which diseases of hot and cold nature can or cannot manifest in two organs at the same time.

Hot and cold diseases that can manifest at the same time	Hot and cold diseases that cannot manifest at the same time
Hot disease at the heart-cold disease at the Intestine	Cold disease at the heart-hot disease at the Intestine
Hot disease at the lungs-cold disease at the large Intestine	Cold disease at the lungs-hot disease at the large intestine
Hot disease at the liver-cold disease at the gall bladder	Cold disease at the liver-hot disease at the gall Bladder
Hot disease at the spleen-cold disease at the Stomach	Cold disease at the spleen-hot disease at the Stomach
Hot disease at the kidneys-cold disease at the reproductive organs or bladder	Cold disease at the kidneys-hot disease at the reproductive organs or bladder

3 Pulses Indicative of Death

Changing Pulses

The pulse that changes in the course of its flow is to be interpreted as a close sign of death. In his Commentary to the Examination of Pulse and Urine, Mipham Rinpoché presents the following lists of death pulses present in specific disorders:

1. The death pulse present in wind diseases resembles a prayer flag fluttering at times its beat is quick, at times slow and at times absent/halted.

2. The death pulse present in bile diseases resembles [13] the tip of a hawk's tail that vibrates rapidly, when (having spotted the prey) the hawk stands still in the sky; the pulse is so quick that its frequency is difficult to ascertain.

3. The death pulse present in phlegm diseases resembles a drop of water that drops into a house in ruin, it is weak, and its motion halts between one beat and the next. Thus, its beats are not consecutive.

4. The death pulse present in a complex disease of wind and bile resembles an object (such as a blade of grass) that touches the running water vibrates continuously incapable of remaining still, and stopping only when it is grasped. In the same way, this pulse vibrates while moving, but upon pressure its motion stops.

5. The death pulse present in a complex disease of phlegm and wind resembles the jump of an angry fish that seeing food thrown by someone at the surface of the water, emerges quickly at the surface to return to the depths once it has ingested the morsel. Similarly, such a pulse beat intensely emerging to the surface, then disappearing.

6. The death pulse present in a complex disease of phlegm and bile resembles a sparrow that eats grains, picking one, two, three or more, then remain still for a while before restarting to eat in the same. In the same way this pulse, pulsates clearly, but, at the same time in a weak motion for a certain number of beats, then stops to re-start again.

7. The pulse present in a disease of the dark phlegm resembles a frog that jumps and then stops. Similarly, this pulse is bulky, intense and long that halts after each beat.

8. The pulse present in dropsy resembles the drool of an old elephant which falls from its mouth uninterrupted and without breaking. Likewise, this pulse has frequency that cannot be distinguished, and has an obscure motion

in its depth. Other pulses whose characteristics are not traceble to a specific disease, but that resembles those just mentioned, are to be considered as death pulses

9. A thin and weak pulse characteristic of a chronic condition in someone newly effected by a serious and sudden disease.

10. A very strong, emergent and agitated pulse in a person who has suffered from a long debilitating disease.

11. The pulse characteristic of a hot disease in a person who has a cold disease, and the pulse characteristic of a cold disease in a person who has a hot disease.

12. A normal pulse in cases of strong diseases such as pulmonary fever, intoxication from ingestion of bad meat, complex disease of phlegm and bile and tumors at the stomach. These last pulses (9, 10, 11, 12) are signs of death because their characteristics sonodissimilar from those indicative of the actual disease affecting the person [141

Absent Pulses

As for the absent pulse, in the Commentary to the Examination of Pulse and Urine, Mipham states the following:

The pulse of the heart or that of another organ that is absent where it is usually felt, indicates the deterioration of the flow of wind and blood in that articular and represents an actual sign of death. When the root of a tree dries up, the leaves and the fruits also dry. Similarly, (the signs of the malfunction of an internal organ) reflect externally on the sense organ to which the inner organ is connected. Therefore, the external signs visible on the five sense organs should be observed. An absent pulse protends death only when the external signs are observed on the sense organs .How does one examine the sense organs?

1. The tongue is observed when the heart pulse absent. If the absence of such pulse is accompanied by darkening of tongue and the bulbs of the eyes protruding, the person will die within a day.

2 . The nose is examined when the lung pulse is absent. If the nose collapses on itself, and its inner hairs turn from down to up, the person will die within two days.

3. The eyes are examined when the liver pulse is absent. If the eyes roll up in the head, and the hair of the eyebrows separate pointing in different directions, the person will die within three days.

4. The lips are examined if the spleen pulse is absent. If the lips are loose and the xiphoid process sink, the person will die within five days.

5. The ears are examined if the kidney pulse is absent. If the ears are collapsed, and adhere to the head, loose their complexion, and when closed the usual sound "uur" is not heard, the person will die within three days from the moment these signs have manifested.

Halting pulses

Halting pulses can be of three different types: indication of disease, of provocations and of death. The halting diseased pulse is one of two cases: a halting one in the general beat in case of a disease and; a halting one of the pulse of a particular organ due to that organ being affected by a disease. The halting pulse of provocations is absent in an irregular pattern (in relation to one or the other organ) and the beat undergoes many changes (at times is strong; at times is weak, etc.). The halting death pulse stops always after a definite numbers of beats (i. e., after three, or ten beats), in this case the person will die at that very moment or after a short while.

On reaching certainty that a halting pulse indicates the presence of a provocations the appropriate rites need to be performed. If the halting pulse is ascertained be caused by a particular disease, reliance on proper remedies will cure the illness and bring about the disappearance of the halting pulse. A pulse that does not stop halting and does not show signs of improvement, despite applying these remedies portends death [15]. To really ascertain that a halting pulse portends death the pulse needs to be examined several times. A single examination cannot give that certainty because the pulse can halt because of various conditions. For instance a disease can make the pulse submerge and thus disappear or, a sudden circumstance such as a strong fear can conceal the pulse and make it imperceptible. Similarly, the influence of a strong provocation of energy causes the pulse to disappear. In these cases, the halting pulse does not portend death.

